

CITATION REPORT

List of articles citing

Biochemical pathways of caspase activation during apoptosis

DOI: 10.1146/annurev.cellbio.15.1.269

Annual Review of Cell and Developmental Biology,
1999, 15, 269-90.

Source: <https://exaly.com/paper-pdf/30786768/citation-report.pdf>

Version: 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| # | Paper | IF | Citations |
|------|--|----|-----------|
| 2202 | Caspase inhibitor decreases apoptosis in pyrogallol-treated lung cancer Calu-6 cells via the prevention of GSH depletion. 1992 , 33, 1099 | | 2 |
| 2201 | Caspase activity plays an essential role in long-term memory. 2000 , 11, 2811-6 | | 63 |
| 2200 | Translocation of Bax to mitochondria during apoptosis measured by laser scanning cytometry. 2000 , 41, 83-88 | | 55 |
| 2199 | MEK/ERK signaling pathway regulates the expression of Bcl-2, Bcl-XL, and Mcl-1 and promotes survival of human pancreatic cancer cells. 2000 , 79, 355-369 | | 332 |
| 2198 | Apoptosis in cancer: cause and cure. 2000 , 22, 1007-17 | | 149 |
| 2197 | Mitochondrial control of cell death. 2000 , 6, 513-9 | | 2704 |
| 2196 | Understanding IAP function and regulation: a view from Drosophila. 2000 , 7, 1045-56 | | 115 |
| 2195 | DNA fragmentation in apoptosis. 2000 , 10, 205-11 | | 172 |
| 2194 | Executionary pathway for apoptosis: lessons from mutant mice. 2000 , 10, 267-78 | | 35 |
| 2193 | The most unkindest cut of all: on the multiple roles of mammalian caspases. 2000 , 14, 1514-25 | | 86 |
| 2192 | Positive and negative regulation of apoptotic pathways by cytotoxic agents in hematological malignancies. 2000 , 14, 1833-49 | | 123 |
| 2191 | The biochemistry of apoptosis. 2000 , 407, 770-6 | | 5867 |
| 2190 | p21(WAF1/Cip1): more than a break to the cell cycle?. 2000 , 1471, M43-56 | | 240 |
| 2189 | Mitochondria as the central control point of apoptosis. 2000 , 10, 369-77 | | 1591 |
| 2188 | Apoptosis: a method for evaluating the cryopreservation of whole blood and peripheral blood mononuclear cells. 2000 , 244, 139-44 | | 64 |
| 2187 | The transcriptional signature of dioxin in human hepatoma HepG2 cells. 2000 , 60, 1129-42 | | 198 |
| 2186 | Minireview: apoptosis as seen through a lens. 2000 , 5, 203-9 | | 64 |

| | | |
|------|--|-----|
| 2185 | Suicidal differential housekeeping gene activity in apoptosis induced by DCNP. 2000 , 5, 379-88 | 5 |
| 2184 | The N-terminal 34 kDa fragment of Helicobacter pylori vacuolating cytotoxin targets mitochondria and induces cytochrome c release. 2000 , 19, 6361-70 | 261 |
| 2183 | The role of apoptosis in regulating hematopoiesis and hematopoietic stem cells. 2000 , 22, 83-94 | 36 |
| 2182 | Cellular interactions, immunodeficiency and autoimmunity in CLL. 2000 , 42, 21-5 | 6 |
| 2181 | Loss of dystrophin and some dystrophin-associated proteins with concomitant signs of apoptosis in rat leg muscle overworked in extension. 2000 , 100, 618-26 | 32 |
| 2180 | Evaluation of Apaf-1 and procaspases-2, -3, -7, -8, and -9 as potential prognostic markers in acute leukemia. 2000 , 96, 3922-3931 | 50 |
| 2179 | Apoptosis in sepsis. 2000 , 28, N105-13 | 73 |
| 2178 | Molecular cloning and characterization of a human mitochondrial ceramidase. 2000 , 275, 21508-13 | 204 |
| 2177 | Skin-specific caspase-1-transgenic mice show cutaneous apoptosis and pre-endotoxin shock condition with a high serum level of IL-18. 2000 , 165, 997-1003 | 118 |
| 2176 | BRCA1 facilitates stress-induced apoptosis in breast and ovarian cancer cell lines. 2000 , 275, 33487-96 | 110 |
| 2175 | Caspase-1 and -3 are sequentially activated in motor neuron death in Cu,Zn superoxide dismutase-mediated familial amyotrophic lateral sclerosis. 2000 , 97, 13901-6 | 288 |
| 2174 | Cross-Talk in Cell Death Signaling. 2000 , 192, F21-F26 | 195 |
| 2173 | Caspases disrupt the nuclear-cytoplasmic barrier. 2000 , 151, 951-9 | 204 |
| 2172 | Transcriptional control of hepatocanalicular transporter gene expression. 2000 , 20, 323-37 | 43 |
| 2171 | Akt regulates cell survival and apoptosis at a postmitochondrial level. 2000 , 151, 483-94 | 384 |
| 2170 | v-Src generates a p53-independent apoptotic signal. 2000 , 20, 9271-80 | 49 |
| 2169 | Metabolic depletion of ATP by fructose inversely controls CD95- and tumor necrosis factor receptor 1-mediated hepatic apoptosis. 2000 , 191, 1975-85 | 70 |
| 2168 | Adeno-associated virus type 2 Rep78 induces apoptosis through caspase activation independently of p53. 2000 , 74, 9441-50 | 91 |

| | | |
|------|---|------|
| 2167 | Cell death regulation in <i>Drosophila</i> : conservation of mechanism and unique insights. 2000 , 150, F69-76 | 87 |
| 2166 | Apoptosis control in syncytia induced by the HIV type 1-envelope glycoprotein complex: role of mitochondria and caspases. 2000 , 192, 1081-92 | 203 |
| 2165 | Peg3/Pw1 promotes p53-mediated apoptosis by inducing Bax translocation from cytosol to mitochondria. 2000 , 97, 12050-5 | 168 |
| 2164 | Evidence that dynamin-2 functions as a signal-transducing GTPase. 2000 , 150, 145-54 | 98 |
| 2163 | Cross-talk between two cysteine protease families. Activation of caspase-12 by calpain in apoptosis. 2000 , 150, 887-94 | 1005 |
| 2162 | Inhibition of cyclin-dependent kinase activity and induction of apoptosis by preussin in human tumor cells. 2000 , 44, 2794-801 | 45 |
| 2161 | The importance of adenosine deaminase for lymphocyte development and function. 2000 , 272, 311-5 | 65 |
| 2160 | hTERT can function with rabbit telomerase RNA: regulation of gene expression and attenuation of apoptosis. 2000 , 278, 503-10 | 44 |
| 2159 | 25-Hydroxycholesterol activates a cytochrome c release-mediated caspase cascade. 2000 , 278, 557-63 | 40 |
| 2158 | Cleavage of Poly(ADP-ribose) polymerase measured in situ in individual cells: relationship to DNA fragmentation and cell cycle position during apoptosis. 2000 , 255, 125-32 | 109 |
| 2157 | Induction of apoptosis by cancer chemotherapy. 2000 , 256, 42-9 | 979 |
| 2156 | During apoptosis of HL-60 and U-937 cells caspases are activated independently of dissipation of mitochondrial electrochemical potential. 2000 , 257, 290-7 | 55 |
| 2155 | Activation of caspases measured in situ by binding of fluorochrome-labeled inhibitors of caspases (FLICA): correlation with DNA fragmentation. 2000 , 259, 308-13 | 226 |
| 2154 | Apoptosis of syncytia induced by the HIV-1-envelope glycoprotein complex: influence of cell shape and size. 2000 , 261, 119-26 | 22 |
| 2153 | Insights into programmed cell death through structural biology. 2000 , 103, 273-82 | 265 |
| 2152 | A cytochrome c-GFP fusion is not released from mitochondria into the cytoplasm upon expression of Bax in yeast cells. 2000 , 471, 235-9 | 35 |
| 2151 | Apoptosis-inducing factor (AIF): a ubiquitous mitochondrial oxidoreductase involved in apoptosis. 2000 , 476, 118-23 | 338 |
| 2150 | CREB is cleaved by caspases during neural cell apoptosis. 2000 , 486, 281-4 | 35 |

| | | |
|------|--|-----|
| 2149 | Critical role of reactive oxygen species and mitochondrial permeability transition in microcystin-induced rapid apoptosis in rat hepatocytes. 2000 , 32, 547-55 | 202 |
| 2148 | Programmed death in bacteria. 2000 , 64, 503-14 | 442 |
| 2147 | Fas (CD95/APO-1): signaux et fonctions. 2000 , 11, 37-56 | |
| 2146 | Rapid caspase-3 activation during apoptosis revealed using fluorescence-resonance energy transfer. 2000 , 1, 266-70 | 216 |
| 2145 | New strategies in the treatment of acute myelogenous leukemia: mobilization and transplantation of autologous peripheral blood stem cells in adult patients. 2000 , 18, 343-51 | 99 |
| 2144 | Vesicle permeabilization by protofibrillar alpha-synuclein: implications for the pathogenesis and treatment of Parkinson's disease. 2001 , 40, 7812-9 | 599 |
| 2143 | Nucleotide receptors: an emerging family of regulatory molecules in blood cells. 2001 , 97, 587-600 | 607 |
| 2142 | Involvement of mitochondria in apoptosis. 2001 , 19, 45-55 | 32 |
| 2141 | Current concepts in cell death. 2001 , Chapter 18, Unit 18.1 | 2 |
| 2140 | Programmed cell death in the ovary: insights and future prospects using genetic technologies. 2001 , 15, 845-53 | 86 |
| 2139 | Caspase-dependent chemotherapy-induced death of glioma cells requires mitochondrial cytochrome c release. 2001 , 281, 322-7 | 24 |
| 2138 | The ex vivo differential expression of apoptosis signaling cofactors in the developing perinatal lung: essential role of oxygenation during the transition from placental to pulmonary-based respiration. 2001 , 281, 311-6 | 18 |
| 2137 | Crosstalk between NF-kappaB-activating and apoptosis-inducing proteins of the TNF-receptor complex. 2001 , 4, 259-65 | 64 |
| 2136 | Cleavage of bid may amplify caspase-8-induced neuronal death following focally evoked limbic seizures. 2001 , 8, 568-80 | 93 |
| 2135 | Caspase 7 downregulation as an immunohistochemical marker of colonic carcinoma. 2001 , 32, 461-7 | 67 |
| 2134 | Molecular pathways involved in the neurotoxicity of 6-OHDA, dopamine and MPTP: contribution to the apoptotic theory in Parkinson's disease. 2001 , 65, 135-72 | 933 |
| 2133 | Tributyryn, an oral butyrate analogue, induces apoptosis through the activation of caspase-3. 2001 , 171, 57-65 | 31 |
| 2132 | Regulation of apoptosis by somatostatin and substance P in peritoneal macrophages. 2001 , 101, 43-9 | 25 |

| | | |
|------|---|------|
| 2131 | Amyotrophic lateral sclerosis. 2001 , 344, 1688-700 | 1488 |
| 2130 | Death-receptor contribution to the germinal-center reaction. 2001 , 22, 677-82 | 76 |
| 2129 | Viral proteins and the mitochondrial apoptotic checkpoint. 2001 , 12, 181-8 | 16 |
| 2128 | Adenovirus L4-100K assembly protein is a granzyme B substrate that potently inhibits granzyme B-mediated cell death. 2001 , 14, 751-61 | 69 |
| 2127 | Structural analysis of a functional DIAP1 fragment bound to grim and hid peptides. 2001 , 8, 95-104 | 102 |
| 2126 | Phosphorylation of bid by casein kinases I and II regulates its cleavage by caspase 8. 2001 , 8, 601-11 | 309 |
| 2125 | Blocking caspase-3-mediated proteolysis of IKKbeta suppresses TNF-alpha-induced apoptosis. 2001 , 8, 1005-16 | 97 |
| 2124 | Systemic steroid pretreatment improves cerebral protection after circulatory arrest. 2001 , 72, 1465-71; discussion 1471-2 | 40 |
| 2123 | Structural basis of caspase-7 inhibition by XIAP. 2001 , 104, 769-80 | 472 |
| 2122 | Crystal structure of a procaspase-7 zymogen: mechanisms of activation and substrate binding. 2001 , 107, 399-407 | 213 |
| 2121 | In vivo imaging of gene expression:. 2001 , 8, 15-23 | 53 |
| 2120 | Caspases: conductors of the cell death machinery in lymphoma cells. 2001 , 41, 247-53 | 11 |
| 2119 | Molecular mechanisms for apoptosis induced by signaling through the B cell antigen receptor. 2001 , 20, 791-803 | 9 |
| 2118 | Dimeric procaspase-3 unfolds via a four-state equilibrium process. 2001 , 40, 14236-42 | 49 |
| 2117 | Coupling endoplasmic reticulum stress to the cell death program. Mechanism of caspase activation. 2001 , 276, 33869-74 | 459 |
| 2116 | Heat shock protein 70 neutralizes apoptosis-inducing factor. 2001 , 1, 590-2 | 21 |
| 2115 | Effect of pH, ionic charge, and osmolality on cytochrome c-mediated caspase-3 activity. 2001 , 281, C1196-204 | 66 |
| 2114 | Reactive oxygen species and caspase activation mediate silica-induced apoptosis in alveolar macrophages. 2001 , 280, L10-7 | 40 |

| | | |
|------|--|-----|
| 2113 | NSAIDs induce both necrosis and apoptosis in guinea pig gastric mucosal cells in primary culture. 2001 , 281, G1092-100 | 65 |
| 2112 | Apoptosis in skeletal muscle. 2001 , 6, D1-D11 | 49 |
| 2111 | Inhibitors of caspase homologues suppress an apoptotic phenotype in cultured rabbit corpora lutea. 2001 , 13, 395-403 | 7 |
| 2110 | BAX Contributes to Apoptotic-Like Death Following Neonatal Hypoxia-Ischemia: Evidence for Distinct Apoptosis Pathways. 2001 , 7, 644-655 | 110 |
| 2109 | Apoptosis and the response to anticancer therapy. 2001 , 13, 453-62 | 67 |
| 2108 | Trifluoromethyl ketone-based inhibitors of apoptosis in cerebellar granule neurons. 2001 , 24, 1335-7 | 3 |
| 2107 | cDNA cloning and promoter analysis of rat caspase-9. 2001 , 360, 49-56 | 19 |
| 2106 | Resistance of bone marrow-derived macrophages to apoptosis is associated with the expression of X-linked inhibitor of apoptosis protein in primary cultures of bone marrow cells. 2001 , 353, 299-306 | 40 |
| 2105 | Resistance of bone marrow-derived macrophages to apoptosis is associated with the expression of X-linked inhibitor of apoptosis protein in primary cultures of bone marrow cells. 2001 , 353, 299-306 | 23 |
| 2104 | Rapid extracellular release of cytochrome c is specific for apoptosis and marks cell death in vivo. 2001 , 98, 1542-8 | 134 |
| 2103 | Use of flow and laser-scanning cytometry in analysis of cell death. 2001 , 66, 69-109 | 24 |
| 2102 | Proteinase families and their inhibitors. 2001 , 66, 247-87 | 9 |
| 2101 | In situ detection of dying cells in normal and pathological tissues. 2001 , 66, 393-415 | 3 |
| 2100 | Damage to nuclear DNA in Lewy body disease. 2001 , 12, 2725-9 | 5 |
| 2099 | The 2-5A/RNase L/RNase L inhibitor (RLI) [correction of (RNI)] pathway regulates mitochondrial mRNAs stability in interferon alpha-treated H9 cells. 2001 , 276, 48473-82 | 63 |
| 2098 | Apaf1 in developmental apoptosis and cancer: how many ways to die?. 2001 , 58, 1688-97 | 36 |
| 2097 | Ricosomes: an organelle for developmentally regulated programmed cell death in senescing plant tissues. 2001 , 88, 49-58 | 57 |
| 2096 | Ablation of axial structures activates apoptotic pathways in somite cells of the chick embryo. 2001 , 204, 389-98 | 10 |

| | | |
|------|--|-----|
| 2095 | Expression of p53 and Ki-67 antigen in bone marrow giant proerythroblasts associated with human parvovirus B19 infection. 2001 , 74, 147-52 | 6 |
| 2094 | Caspase-2 activation is redundant during seizure-induced neuronal death. 2001 , 77, 886-95 | 38 |
| 2093 | Renal cell apoptosis in chronic obstructive uropathy: the roles of caspases. 2001 , 60, 924-34 | 62 |
| 2092 | Functional decline in aging and disease: a role for apoptosis. 2001 , 49, 1234-40 | 68 |
| 2091 | Cytochrome c-mediated caspase-9 activation triggers apoptosis in Streptococcus pyogenes-infected epithelial cells. 2001 , 3, 395-405 | 73 |
| 2090 | Differential modulation of cellular death and survival pathways by conjugated bile acids. 2001 , 2, 11 | 27 |
| 2089 | Apoptotic activity in gestational trophoblastic disease correlates with clinical outcome: assessment by the caspase-related M30 CytoDeath antibody. 2001 , 38, 243-9 | 55 |
| 2088 | Bax and caspases are inhibited by endogenous nitric oxide in dorsal root ganglion neurons in vitro. 2001 , 14, 1229-36 | 41 |
| 2087 | Caspase activation during spontaneous and radiation-induced apoptosis in the murine intestine. 2001 , 195, 285-92 | 122 |
| 2086 | Apoptosis in sea urchin oocytes, eggs, and early embryos. 2001 , 60, 553-61 | 49 |
| 2085 | Detection of caspases activation by fluorochrome-labeled inhibitors: Multiparameter analysis by laser scanning cytometry. 2001 , 44, 73-82 | 118 |
| 2084 | A flow cytometry assay simultaneously detects independent apoptotic parameters. 2001 , 45, 151-7 | 87 |
| 2083 | Role of caspases in neuronal apoptosis. 2001 , 52, 515-533 | 10 |
| 2082 | Drug-resistance in human melanoma. 2001 , 93, 617-22 | 144 |
| 2081 | Caspase inhibition and N6-benzyladenosine-induced apoptosis in HL-60 cells. 2001 , 83, 678-89 | 26 |
| 2080 | Organometallic complexes with biological molecules. XV. Effects of tributyltin(IV)chloride on enzyme activity, Ca ²⁺ , and biomolecule and synthesis in Ciona intestinalis (Urochordata) ovary. 2001 , 15, 213-220 | 12 |
| 2079 | Mitochondria--the suicide organelles. 2001 , 23, 111-5 | 149 |
| 2078 | The role of calpain in caspase activation during etoposide induced apoptosis in T cells. 2001 , 31, 2035-41 | 42 |

| | | |
|------|--|-----|
| 2077 | Critical role of calcium overloading in cadmium-induced apoptosis in mouse thymocytes. 2001 , 171, 12-9 | 61 |
| 2076 | The heterocyclic amine, 3-amino-1,4-dimethyl-5H-pyrido[4,3-b]indole induces apoptosis in cocultures of rat parenchymal and nonparenchymal liver cells. 2001 , 177, 59-67 | 7 |
| 2075 | The role of apoptosis in regulating hematopoietic stem cell numbers. 2001 , 6, 239-52 | 26 |
| 2074 | Cytochrome c: which way out?. 2001 , 34, 605-7 | 1 |
| 2073 | Bile acid-induced rat hepatocyte apoptosis is inhibited by antioxidants and blockers of the mitochondrial permeability transition. 2001 , 33, 616-26 | 246 |
| 2072 | Direct cleavage of the human DNA fragmentation factor-45 by granzyme B induces caspase-activated DNase release and DNA fragmentation. 2001 , 20, 3101-13 | 91 |
| 2071 | Aggressive childhood neuroblastomas do not express caspase-8: an important component of programmed cell death. 2001 , 79, 428-36 | 95 |
| 2070 | A structural view of mitochondria-mediated apoptosis. 2001 , 8, 394-401 | 246 |
| 2069 | Programmed cell death in cerebral ischemia. 2001 , 21, 99-109 | 411 |
| 2068 | Intracellular Bax translocation after transient cerebral ischemia: implications for a role of the mitochondrial apoptotic signaling pathway in ischemic neuronal death. 2001 , 21, 321-33 | 192 |
| 2067 | Ibudilast attenuates astrocyte apoptosis via cyclic GMP signalling pathway in an in vitro reperfusion model. 2001 , 133, 841-8 | 38 |
| 2066 | Sphingosine generation, cytochrome c release, and activation of caspase-7 in doxorubicin-induced apoptosis of MCF7 breast adenocarcinoma cells. 2001 , 8, 162-71 | 111 |
| 2065 | Pro-caspase-3 overexpression sensitises ovarian cancer cells to proteasome inhibitors. 2001 , 8, 256-64 | 31 |
| 2064 | Thyroid hormone regulation of apoptotic tissue remodeling during anuran metamorphosis. 2001 , 11, 245-52 | 43 |
| 2063 | Defective caspase-3 relocalization in non-small cell lung carcinoma. 2001 , 20, 2877-88 | 64 |
| 2062 | The mitochondrion in apoptosis: how Pandora's box opens. 2001 , 2, 67-71 | 840 |
| 2061 | Commuting the death sentence: how oocytes strive to survive. 2001 , 2, 838-48 | 276 |
| 2060 | Induction of gadd45beta by NF-kappaB downregulates pro-apoptotic JNK signalling. 2001 , 414, 308-13 | 661 |

| | | |
|------|--|-----|
| 2059 | Inhibition of JNK activation through NF-kappaB target genes. 2001 , 414, 313-7 | 682 |
| 2058 | Upregulation of the inhibitor of apoptosis proteins in activated T lymphocytes from patients with multiple sclerosis. 2001 , 119, 350-7 | 36 |
| 2057 | Interferon-beta therapy downregulates the anti-apoptosis protein FLIP in T cells from patients with multiple sclerosis. 2001 , 120, 199-207 | 41 |
| 2056 | Role of caspases in human renal proximal tubular epithelial cell apoptosis. 2001 , 433, 135-40 | 10 |
| 2055 | Programmed cell death: alive and well in the new millennium. 2001 , 11, 526-34 | 540 |
| 2054 | Life-or-death decisions by the Bcl-2 protein family. 2001 , 26, 61-6 | 774 |
| 2053 | Ca(2+)-calmodulin antagonist chlorpromazine and poly(ADP-ribose) polymerase modulators 4-aminobenzamide and nicotinamide influence hepatic expression of BCL-XL and P53 and protect against acetaminophen-induced programmed and unprogrammed cell death in mice. 2001 , 31, 277-91 | 52 |
| 2052 | Alveolar type II cell apoptosis. 2001 , 129, 267-85 | 36 |
| 2051 | Apoptosis, cell volume regulation and volume-regulatory chloride channels. 2001 , 130, 377-83 | 150 |
| 2050 | Is caspase-3 inhibition a valid therapeutic strategy in cerebral ischemia?. 2001 , 6, 671-680 | 39 |
| 2049 | Dominant cell death induction by extramitochondrially targeted apoptosis-inducing factor. 2001 , 15, 758-67 | 210 |
| 2048 | The rinosomes of senescing plant tissue bud from the endoplasmic reticulum. 2001 , 98, 5353-8 | 87 |
| 2047 | Role of mitochondria and caspases in vitamin D-mediated apoptosis of MCF-7 breast cancer cells. 2001 , 276, 9101-7 | 141 |
| 2046 | The tumor suppressor gene PTEN can regulate cardiac hypertrophy and survival. 2001 , 276, 35786-93 | 108 |
| 2045 | Apoptosis signal-regulating kinase 1 controls the proapoptotic function of death-associated protein (Daxx) in the cytoplasm. 2001 , 276, 39103-6 | 91 |
| 2044 | Hepatocyte growth factor/scatter factor blocks the mitochondrial pathway of apoptosis signaling in breast cancer cells. 2001 , 276, 47257-65 | 36 |
| 2043 | The human immunodeficiency virus type 1 accessory protein Vpu induces apoptosis by suppressing the nuclear factor kappaB-dependent expression of antiapoptotic factors. 2001 , 194, 1299-311 | 121 |
| 2042 | Human immunodeficiency virus 1 envelope glycoprotein complex-induced apoptosis involves mammalian target of rapamycin/FKBP12-rapamycin-associated protein-mediated p53 phosphorylation. 2001 , 194, 1097-110 | 135 |

| | | |
|------|---|-----|
| 2041 | The mitochondrial permeability transition, release of cytochrome c and cell death. Correlation with the duration of pore openings in situ. 2001 , 276, 12030-4 | 373 |
| 2040 | Glutathione induces apoptosis in cultured macrophages via production of reactive oxygen species and cytochrome c release without mitochondrial depolarization. 2001 , 35, 1-10 | 42 |
| 2039 | Apoptosis enhancement by the HIV-1 Nef protein. 2001 , 166, 81-8 | 83 |
| 2038 | The serine/threonine kinase PAK4 prevents caspase activation and protects cells from apoptosis. 2001 , 276, 14414-9 | 152 |
| 2037 | Decreased cardiolipin synthesis corresponds with cytochrome c release in palmitate-induced cardiomyocyte apoptosis. 2001 , 276, 38061-7 | 190 |
| 2036 | Caspase-3 gene knockout defines cell lineage specificity for programmed cell death signaling in the ovary. 2001 , 142, 2468-80 | 135 |
| 2035 | Regulation of apoptosis by phosphatidylinositol 4,5-bisphosphate inhibition of caspases, and caspase inactivation of phosphatidylinositol phosphate 5-kinases. 2001 , 276, 1865-72 | 68 |
| 2034 | NADH oxidase activity of mitochondrial apoptosis-inducing factor. 2001 , 276, 16391-8 | 300 |
| 2033 | TRAF1 is a substrate of caspases activated during tumor necrosis factor receptor-alpha-induced apoptosis. 2001 , 276, 8087-93 | 54 |
| 2032 | p38 MAP kinase mediates nitric oxide-induced apoptosis of neural progenitor cells. 2001 , 276, 43320-7 | 127 |
| 2031 | Structural biology. Controlling the caspases. 2001 , 294, 1477-8 | 136 |
| 2030 | Activation of pro-death Bcl-2 family proteins and mitochondria apoptosis pathway in tumor necrosis factor-alpha-induced liver injury. 2001 , 276, 27432-40 | 102 |
| 2029 | Bone morphogenetic protein-2 promotes osteoblast apoptosis through a Smad-independent, protein kinase C-dependent signaling pathway. 2001 , 276, 29028-36 | 136 |
| 2028 | Akt is activated in response to an apoptotic signal. 2001 , 276, 30461-6 | 79 |
| 2027 | Unreliability of the cytochrome c-enhanced green fluorescent fusion protein as a marker of cytochrome c release in cells that overexpress Bcl-2. 2001 , 276, 39132-7 | 10 |
| 2026 | Caspase activation by adenovirus e4orf4 protein is cell line specific and is mediated by the death receptor pathway. 2001 , 75, 789-98 | 61 |
| 2025 | Butyric acid-induced T-cell apoptosis is mediated by caspase-8 and -9 activation in a Fas-independent manner. 2001 , 8, 325-32 | 38 |
| 2024 | Induction of p53-independent apoptosis by simian virus 40 small t antigen. 2001 , 75, 9142-55 | 46 |

| | | |
|------|---|-----|
| 2023 | Proteolytic activation of ETK/Bmx tyrosine kinase by caspases. 2001 , 276, 17672-8 | 27 |
| 2022 | Selective cleavage of BLM, the bloom syndrome protein, during apoptotic cell death. 2001 , 276, 12068-75 | 19 |
| 2021 | The Rela(p65) subunit of NF-kappaB is essential for inhibiting double-stranded RNA-induced cytotoxicity. 2001 , 276, 1185-94 | 23 |
| 2020 | Ionizing radiation-induced apoptosis in ataxia-telangiectasia fibroblasts. Roles of caspase-9 and cellular inhibitor of apoptosis protein-1. 2001 , 276, 28842-8 | 18 |
| 2019 | Molecular cloning of ILP-2, a novel member of the inhibitor of apoptosis protein family. 2001 , 21, 4292-301 | 91 |
| 2018 | NF-kappa B activation mediates doxorubicin-induced cell death in N-type neuroblastoma cells. 2001 , 276, 48921-9 | 121 |
| 2017 | Age-dependent myocardial reinduction of apoptosis inhibitors under VAD in heart failure. 2001 , 49, 268-72 | 2 |
| 2016 | Cytochrome c release is upstream to activation of caspase-9, caspase-8, and caspase-3 in the enhanced apoptosis of anaplastic thyroid cancer cells induced by manumycin and paclitaxel. 2001 , 86, 4731-40 | 71 |
| 2015 | Induction of apoptosis in bone marrow neutrophil-lineage cells by classical swine fever virus. 2001 , 82, 1309-1318 | 42 |
| 2014 | Antigenic variation in trypanosomes: enhanced phenotypic variation in a eukaryotic parasite. 2001 , 49, 1-70 | 232 |
| 2013 | A mutational epitope for cytochrome C binding to the apoptosis protease activation factor-1. 2001 , 276, 13034-8 | 102 |
| 2012 | Caspases: recent advances in small molecule inhibitors. 2001 , 11, 1593-1603 | 25 |
| 2011 | FKHR-L1 can act as a critical effector of cell death induced by cytokine withdrawal: protein kinase B-enhanced cell survival through maintenance of mitochondrial integrity. 2002 , 156, 531-42 | 307 |
| 2010 | MEK kinase 1 induces mitochondrial permeability transition leading to apoptosis independent of cytochrome c release. 2002 , 277, 10573-80 | 12 |
| 2009 | Polypyrimidine tract-binding proteins are cleaved by caspase-3 during apoptosis. 2002 , 277, 27200-9 | 34 |
| 2008 | Role of translation initiation factor 2B in control of cell survival by the phosphatidylinositol 3-kinase/Akt/glycogen synthase kinase 3beta signaling pathway. 2002 , 22, 578-86 | 143 |
| 2007 | NRAGE, a p75 neurotrophin receptor-interacting protein, induces caspase activation and cell death through a JNK-dependent mitochondrial pathway. 2002 , 277, 48043-50 | 110 |
| 2006 | Tissue inhibitor of metalloproteinase-3 induces a Fas-associated death domain-dependent type II apoptotic pathway. 2002 , 277, 13787-95 | 104 |

| | | |
|------|---|-----|
| 2005 | Neuronal kappa B-binding factors consist of Sp1-related proteins. Functional implications for autoregulation of N-methyl-D-aspartate receptor-1 expression. 2002 , 277, 44911-9 | 32 |
| 2004 | DNA ligase III is degraded by calpain during cell death induced by DNA-damaging agents. 2002 , 277, 26673-80 | 21 |
| 2003 | Escherichia coli shiga-like toxins induce apoptosis and cleavage of poly(ADP-ribose) polymerase via in vitro activation of caspases. 2002 , 70, 4669-77 | 68 |
| 2002 | Phorbol 12-myristate 13-acetate inhibits death receptor-mediated apoptosis in Jurkat cells by disrupting recruitment of Fas-associated polypeptide with death domain. 2002 , 277, 3776-83 | 66 |
| 2001 | Regulation of DNAS1L3 endonuclease activity by poly(ADP-ribosyl)ation during etoposide-induced apoptosis. Role of poly(ADP-ribose) polymerase-1 cleavage in endonuclease activation. 2002 , 277, 372-8 | 50 |
| 2000 | Microarray analysis reveals an antioxidant responsive element-driven gene set involved in conferring protection from an oxidative stress-induced apoptosis in IMR-32 cells. 2002 , 277, 388-94 | 156 |
| 1999 | SMAC negatively regulates the anti-apoptotic activity of melanoma inhibitor of apoptosis (ML-IAP). 2002 , 277, 12275-9 | 130 |
| 1998 | Protein kinase C-epsilon promotes survival of lung cancer cells by suppressing apoptosis through dysregulation of the mitochondrial caspase pathway. 2002 , 277, 35305-13 | 78 |
| 1997 | Coupling endoplasmic reticulum stress to the cell death program. An Apaf-1-independent intrinsic pathway. 2002 , 277, 21836-42 | 369 |
| 1996 | Comparative sequence analysis of the largest E1A proteins of human and simian adenoviruses. 2002 , 76, 7968-75 | 53 |
| 1995 | Different signaling pathways induce apoptosis in endothelial cells and cardiac myocytes during ischemia/reperfusion injury. 2002 , 90, 745-8 | 151 |
| 1994 | Nip21 gene expression reduces coxsackievirus B3 replication by promoting apoptotic cell death via a mitochondria-dependent pathway. 2002 , 90, 1251-8 | 38 |
| 1993 | cFLIP protein prevents tumor necrosis factor-alpha-mediated induction of caspase-8-dependent apoptosis in insulin-secreting betaTc-Tet cells. 2002 , 51, 1805-14 | 46 |
| 1992 | Activation of chymotrypsin-like serine protease(s) during apoptosis detected by affinity-labeling of the enzymatic center with fluoresceinated inhibitor. 2002 , 20, 225 | |
| 1991 | HMG-CoA reductase inhibitors and the malignant cell: the statin family of drugs as triggers of tumor-specific apoptosis. 2002 , 16, 508-19 | 444 |
| 1990 | Cholecystokinin induces caspase activation and mitochondrial dysfunction in pancreatic acinar cells. Roles in cell injury processes of pancreatitis. 2002 , 277, 22595-604 | 111 |
| 1989 | Differential roles of insulin receptor substrates in the anti-apoptotic function of insulin-like growth factor-1 and insulin. 2002 , 277, 31601-11 | 78 |
| 1988 | Sequential Activation of Caspases and Serine Proteases (Serpases) During Apoptosis. 2002 , 1, 115-122 | 19 |

| | | |
|------|--|-----|
| 1987 | Adenosine deaminase-deficient mice: models for the study of lymphocyte development and adenosine signaling. 2000 , 486, 57-63 | 4 |
| 1986 | Detection of caspases activation in situ by fluorochrome-labeled inhibitors of caspases (FLICA). 2002 , 203, 289-99 | 18 |
| 1985 | The promise and obstacle of p53 as a cancer therapeutic agent. 2002 , 2, 329-45 | 44 |
| 1984 | Electron microscopic detection of DNA damage labeled by TUNEL. 2002 , 203, 31-9 | 4 |
| 1983 | DNA oxidation or apoptosis: will the real culprit of dna damage in hyperoxic lung injury please stand up?. 2002 , 26, 381-3 | 24 |
| 1982 | Melatonin, mitochondrial homeostasis and mitochondrial-related diseases. 2002 , 2, 133-51 | 123 |
| 1981 | Ajoene, an experimental anti-leukemic drug: mechanism of cell death. 2002 , 16, 74-83 | 70 |
| 1980 | Involvement of transforming growth factor alpha in the regulation of rat ovarian X-linked inhibitor of apoptosis protein expression and follicular growth by follicle-stimulating hormone. 2002 , 66, 1672-80 | 27 |
| 1979 | Hsp72 and stress kinase c-jun N-terminal kinase regulate the bid-dependent pathway in tumor necrosis factor-induced apoptosis. 2002 , 22, 3415-24 | 147 |
| 1978 | Oligomerization and activation of caspase-9, induced by Apaf-1 CARD. 2002 , 99, 4197-202 | 109 |
| 1977 | Apoptosis in hypoxic human pancreatic islets correlates with HIF-1alpha expression. 2002 , 16, 745-7 | 153 |
| 1976 | Epstein-Barr virus BALF1 is a BCL-2-like antagonist of the herpesvirus antiapoptotic BCL-2 proteins. 2002 , 76, 2469-79 | 76 |
| 1975 | Calpain-mediated X-linked inhibitor of apoptosis degradation in neutrophil apoptosis and its impairment in chronic neutrophilic leukemia. 2002 , 277, 33968-77 | 83 |
| 1974 | The role of caspases in cryoinjury: caspase inhibition strongly improves the recovery of cryopreserved hematopoietic and other cells. 2002 , 16, 1651-3 | 82 |
| 1973 | Involvement of DNase gamma in apoptosis associated with myogenic differentiation of C2C12 cells. 2002 , 277, 31031-7 | 43 |
| 1972 | CELL DEATH PATHWAYS AS TARGETS FOR ANTICANCER DRUGS. 2002 , 55-76 | 2 |
| 1971 | The human papillomavirus type 16 E5 protein impairs TRAIL- and FasL-mediated apoptosis in HaCaT cells by different mechanisms. 2002 , 76, 12162-72 | 86 |
| 1970 | Apoptosis-inducing factor (AIF): key to the conserved caspase-independent pathways of cell death?. 2002 , 115, 4727-34 | 406 |

| | | |
|------|--|-----|
| 1969 | Synergistic induction of apoptosis in human myeloid leukemia cells by phorbol 12-myristate 13-acetate and flavopiridol proceeds via activation of both the intrinsic and tumor necrosis factor-mediated extrinsic cell death pathways. 2002 , 61, 1313-21 | 34 |
| 1968 | Feline immunodeficiency virus infection is characterized by B7+CTLA4+ T cell apoptosis. 2002 , 185, 1077-93 | 48 |
| 1967 | Caspase-2 can trigger cytochrome C release and apoptosis from the nucleus. 2002 , 277, 15147-61 | 133 |
| 1966 | Identification of a novel gelsolin truncate in the vertical and metastatic phase malignant melanomas. 2002 , 12, 523-8 | 5 |
| 1965 | Paracrine suppression of apoptosis by cytokine-stimulated neutrophils involves divergent regulation of NF-kappaB, Bcl-X(L), and Bak. 2002 , 17, 47-54 | 21 |
| 1964 | Epstein-Barr virus inhibits the development of dendritic cells by promoting apoptosis of their monocyte precursors in the presence of granulocyte macrophage-colony-stimulating factor and interleukin-4. 2002 , 99, 3725-34 | 81 |
| 1963 | Characterization of caspase-8L: a novel isoform of caspase-8 that behaves as an inhibitor of the caspase cascade. 2002 , 99, 4070-8 | 73 |
| 1962 | Resistance of leukemic cells to 2-chlorodeoxyadenosine is due to a lack of calcium-dependent cytochrome c release. 2002 , 99, 655-63 | 53 |
| 1961 | Effects of the Bcr/abl kinase inhibitors STI571 and adaphostin (NSC 680410) on chronic myelogenous leukemia cells in vitro. 2002 , 99, 664-71 | 100 |
| 1960 | Transforming growth factor-beta1 is responsible for maturation-dependent spontaneous apoptosis of cultured gastric pit cells. 2002 , 227, 402-11 | 13 |
| 1959 | Among substituted 9,10-dihydro-9,10-[1,2]benzenoanthracene-1,4,5,8-tetraones, the lead antitumor triptycene bisquinone TT24 blocks nucleoside transport, induces apoptotic DNA fragmentation and decreases the viability of L1210 leukemic cells in the nanomolar range of daunorubicin in vitro. 2002 , 13, 567-81 | 12 |
| 1958 | The procaspase-8 isoform, procaspase-8L, recruited to the BAP31 complex at the endoplasmic reticulum. 2002 , 99, 4331-6 | 106 |
| 1957 | P-glycoprotein as a General Antiapoptotic Protein. 2002 , 433-441 | |
| 1956 | Preferential transfection of adult mouse neural stem cells and their immediate progeny in vivo with polyethylenimine. 2002 , 19, 165-74 | 39 |
| 1955 | Expression and differential processing of caspases 6 and 7 in relation to specific epileptiform EEG patterns following limbic seizures. 2002 , 10, 71-87 | 27 |
| 1954 | Expression, preparation, and high-throughput screening of caspase-8: discovery of redox-based and steroid diacid inhibition. 2002 , 399, 195-205 | 37 |
| 1953 | Roles of DNA fragmentation factor and poly(ADP-ribose) polymerase-1 in sensitization of fibroblasts to tumor necrosis factor-induced apoptosis. 2002 , 290, 796-801 | 23 |
| 1952 | Calpain activation after mitochondrial permeability transition in microcystin-induced cell death in rat hepatocytes. 2002 , 291, 321-31 | 89 |

| | | |
|------|---|-----|
| 1951 | The protection of hybridoma cells from apoptosis by caspase inhibition allows culture recovery when exposed to non-inducing conditions. 2002 , 95, 205-14 | 27 |
| 1950 | Transgenic mice overexpressing human Bcl-2 are resistant to hepatic ischemia and reperfusion. 2002 , 36, 218-25 | 60 |
| 1949 | Lysophosphatidic acid protects and rescues intestinal epithelial cells from radiation- and chemotherapy-induced apoptosis. 2002 , 123, 206-16 | 99 |
| 1948 | Expression of Bcl-2 family member Bid in normal and malignant tissues. 2002 , 4, 129-40 | 64 |
| 1947 | ERK-1/2 and p38 kinase oppositely regulate nitric oxide-induced apoptosis of chondrocytes in association with p53, caspase-3, and differentiation status. 2002 , 277, 1332-9 | 199 |
| 1946 | Apoptosis and heart failure: mechanisms and therapeutic implications. 2002 , 2, 43-57 | 52 |
| 1945 | Combination therapy for ischemic stroke: potential of neuroprotectants plus thrombolytics. 2002 , 2, 303-13 | 29 |
| 1944 | Purine and Pyrimidine Metabolism in Man X. 2002 , | |
| 1943 | RIN4 interacts with Pseudomonas syringae type III effector molecules and is required for RPM1-mediated resistance in Arabidopsis. 2002 , 108, 743-54 | 883 |
| 1942 | Expression and functional analysis of an inhibitor of apoptosis protein from Trichoplusia ni. 2002 , 293, 675-9 | 9 |
| 1941 | Restoration of UV sensitivity in UV-resistant HeLa cells by antisense-mediated depletion of damaged DNA-binding protein 2 (DDB2). 2002 , 512, 168-72 | 12 |
| 1940 | Mitochondria hyperpolarization is an early event in oxidized low-density lipoprotein-induced apoptosis in Caco-2 intestinal cells. 2002 , 523, 200-6 | 88 |
| 1939 | Caspase 9 activation by the dsRNA-dependent protein kinase, PKR: molecular mechanism and relevance. 2002 , 529, 249-55 | 41 |
| 1938 | Methamphetamine induces apoptosis in an immortalized rat striatal cell line by activating the mitochondrial cell death pathway. 2002 , 42, 837-45 | 104 |
| 1937 | Expression profiles of 109 apoptosis pathway-related genes in 82 mouse tissues and experimental conditions. 2002 , 297, 537-44 | 7 |
| 1936 | Reduced expression of the inhibitor of apoptosis proteins in T cells from patients with multiple sclerosis following interferon-beta therapy. 2002 , 129, 224-31 | 33 |
| 1935 | Inhibition of amyloid-beta aggregation and caspase-3 activation by the Ginkgo biloba extract EGb761. 2002 , 99, 12197-202 | 317 |
| 1934 | Three-dimensional structure of the apoptosome: implications for assembly, procaspase-9 binding, and activation. 2002 , 9, 423-32 | 664 |

| | | |
|------|--|------|
| 1933 | Mechanisms of caspase activation and inhibition during apoptosis. 2002 , 9, 459-70 | 1334 |
| 1932 | A matter of life and death. 2002 , 1, 19-30 | 887 |
| 1931 | Apoptosis and muscle fibre loss in neuromuscular disorders. 2002 , 12, 613-22 | 87 |
| 1930 | Lipoapoptosis: its mechanism and its diseases. 2002 , 1585, 202-12 | 259 |
| 1929 | Involvement of the mitochondrial permeability transition in gentamicin ototoxicity. 2002 , 169, 47-55 | 96 |
| 1928 | Regulation of Bcl-2 family molecules and activation of caspase cascade involved in gypenosides-induced apoptosis in human hepatoma cells. 2002 , 183, 169-78 | 68 |
| 1927 | Induction of poly(ADP-ribose) polymerase-1 cleavage by antitumor triptycene bisquinones in wild-type and daunorubicin-resistant HL-60 cell lines. 2002 , 188, 73-83 | 23 |
| 1926 | Caspase activation in hair cells of the mouse utricle exposed to neomycin. 2002 , 22, 8532-40 | 133 |
| 1925 | . 2002 , | |
| 1924 | Time-dependent changes in ARE-driven gene expression by use of a noise-filtering process for microarray data. 2002 , 9, 137-44 | 24 |
| 1923 | Cytochrome c release from mitochondria in the aging heart: a possible mechanism for apoptosis with age. 2002 , 282, R423-30 | 127 |
| 1922 | Caspase Knockouts: Matters of Life and Death. 13-35 | |
| 1921 | Polyamine depletion prevents camptothecin-induced apoptosis by inhibiting the release of cytochrome c. 2002 , 282, C1290-7 | 52 |
| 1920 | Regulation of apoptosis in the endocardial cushions of the developing chick heart. 2002 , 282, C1348-60 | 17 |
| 1919 | Exogenous smac induces competence and permits caspase activation in sympathetic neurons. 2002 , 22, 8018-27 | 41 |
| 1918 | The Fas/FasL system in reproduction: survival and apoptosis. 2002 , 2, 1828-42 | 6 |
| 1917 | Régulation de la mort cellulaire programmée : vers une conception plus dynamique. 2002 , 18, 841-852 | 1 |
| 1916 | Deficiency in methionine, tryptophan, isoleucine, or choline induces apoptosis in cultured cells. 2002 , 132, 1840-7 | 38 |

| | | |
|------|---|-----|
| 1915 | Identifying functional relationships among human genes by systematic analysis of biological literature. 2002 , 3, 16 | 5 |
| 1914 | Recent advances in Blastocystis hominis research: hot spots in terra incognita. 2002 , 32, 789-804 | 94 |
| 1913 | Ageing and apoptosis. 2002 , 123, 245-60 | 131 |
| 1912 | Disease activity in multiple sclerosis correlates with T lymphocyte expression of the inhibitor of apoptosis proteins. 2002 , 122, 159-66 | 34 |
| 1911 | Gastric irritant-induced apoptosis in guinea pig gastric mucosal cells in primary culture. 2002 , 1589, 168-80 | 40 |
| 1910 | TGF-beta1 inhibits multiple caspases induced by TNF-alpha in murine osteoblastic MC3T3-E1 cells. 2002 , 1593, 1-8 | 29 |
| 1909 | Death to flies: Drosophila as a model system to study programmed cell death. 2002 , 265, 21-38 | 87 |
| 1908 | Assay of caspase activation in situ combined with probing plasma membrane integrity to detect three distinct stages of apoptosis. 2002 , 265, 111-21 | 69 |
| 1907 | Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca(2+)-dependent endonuclease. 2002 , 63, 225-36 | 194 |
| 1906 | Role of the Fas/Fas ligand system in female reproductive organs: survival and apoptosis. 2002 , 64, 1305-15 | 40 |
| 1905 | Apoptotic DNA fragmentation and tissue homeostasis. 2002 , 12, 84-9 | 114 |
| 1904 | Age-associated increases in the activity of multiple caspases in Fisher 344 rat organs. 2002 , 37, 777-89 | 61 |
| 1903 | Apoptotic molecules and MPTP-induced cell death. 2002 , 24, 599-605 | 106 |
| 1902 | In situ activation of caspases and serine proteases during apoptosis detected by affinity labeling their enzyme active centers with fluorochrome-tagged inhibitors. 2002 , 30, 982-9 | 31 |
| 1901 | Anticarcinogenic effect of FTY720 in human prostate carcinoma DU145 cells: modulation of mitogenic signaling, FAK, cell-cycle entry and apoptosis. 2002 , 98, 167-72 | 69 |
| 1900 | Effector mechanisms of norcantharidin-induced mitotic arrest and apoptosis in human hepatoma cells. 2002 , 100, 158-65 | 125 |
| 1899 | Excitotoxic and metabolic damage to the rodent striatum: role of the P75 neurotrophin receptor and glial progenitors. 2002 , 444, 291-305 | 29 |
| 1898 | Medial forebrain bundle axotomy during development induces apoptosis in dopamine neurons of the substantia nigra and activation of caspases in their degenerating axons. 2002 , 452, 65-79 | 43 |

| | | |
|------|--|-----|
| 1897 | Kinetics of HL-60 cell entry to apoptosis during treatment with TNF-alpha or camptothecin assayed by the stathmo-apoptosis method. 2002 , 47, 143-9 | 42 |
| 1896 | Effects of caspase inhibition on camptothecin-induced apoptosis of HL-60 cells. 2002 , 49, 28-35 | 16 |
| 1895 | Activation of caspase 3 during shear stress-induced neutrophil apoptosis on biomaterials. 2002 , 62, 163-8 | 15 |
| 1894 | Development-dependent disappearance of caspase-3 in skeletal muscle is post-transcriptionally regulated. 2002 , 86, 21-8 | 28 |
| 1893 | Targeted disruption of hsf1 leads to lack of thermotolerance and defines tissue-specific regulation for stress-inducible Hsp molecular chaperones. 2002 , 86, 376-93 | 135 |
| 1892 | New molecular targets of breast cancer therapy. 2002 , 178, 123-33 | 17 |
| 1891 | Wogonin and fisetin induction of apoptosis through activation of caspase 3 cascade and alternative expression of p21 protein in hepatocellular carcinoma cells SK-HEP-1. 2002 , 76, 351-9 | 144 |
| 1890 | Activation of caspase-like proteases and induction of apoptosis by isopentenyladenosine in tobacco BY-2 cells. 2002 , 215, 158-66 | 85 |
| 1889 | Caspase-3 activation and caspase-like proteolytic activity in human perinatal hypoxic-ischemic brain injury. 2002 , 103, 66-73 | 47 |
| 1888 | Tumor escape from killing: role of killer inhibitory receptors and acquisition of tumor resistance to cell death. 2002 , 60, 273-81 | 27 |
| 1887 | Induction and mechanism of apoptotic cell death by propofol in HL-60 cells. 2002 , 46, 1068-74 | 49 |
| 1886 | A view to a kill: ligands for Bcl-2 family proteins. 2002 , 6, 479-85 | 40 |
| 1885 | In vivo and in vitro activation of caspase-8 and -3 associated with Helicobacter pylori infection. 2002 , 4, 713-22 | 18 |
| 1884 | Negative regulation of mitochondrial VDAC channels by C-Raf kinase. 2002 , 3, 14 | 51 |
| 1883 | Upregulated survivin expression in activated T lymphocytes correlates with disease activity in multiple sclerosis. 2002 , 9, 503-10 | 38 |
| 1882 | Role of caspases in murine limb bud cell death induced by 4-hydroperoxycyclophosphamide, an activated analog of cyclophosphamide. 2002 , 66, 288-99 | 29 |
| 1881 | In vitro model for the study of necrosis and apoptosis in native cartilage. 2002 , 198, 5-13 | 66 |
| 1880 | Pre-processed caspase-9 contained in mitochondria participates in apoptosis. 2002 , 9, 82-8 | 64 |

| | | |
|------|---|------|
| 1879 | Recent insights into the mechanism of glucocorticosteroid-induced apoptosis. 2002 , 9, 6-19 | 244 |
| 1878 | Genomic plasticity in cell death susceptibility. 2002 , 9, 96-8 | 3 |
| 1877 | 'Centennial' Nobel Conference on apoptosis and human disease. 2002 , 9, 468-75 | 23 |
| 1876 | Death effector domain-containing proteins DEDD and FLAME-3 form nuclear complexes with the TFIIIC102 subunit of human transcription factor IIIC. 2002 , 9, 439-47 | 23 |
| 1875 | Mitomycin C induces apoptosis and caspase-8 and -9 processing through a caspase-3 and Fas-independent pathway. 2002 , 9, 905-14 | 116 |
| 1874 | T cell apoptosis by tryptophan catabolism. 2002 , 9, 1069-77 | 722 |
| 1873 | The role of mitochondrial factors in apoptosis: a Russian roulette with more than one bullet. 2002 , 9, 1031-42 | 498 |
| 1872 | The C-terminal moiety of HIV-1 Vpr induces cell death via a caspase-independent mitochondrial pathway. 2002 , 9, 1212-9 | 72 |
| 1871 | PTEN sensitizes prostate cancer cells to death receptor-mediated and drug-induced apoptosis through a FADD-dependent pathway. 2002 , 21, 319-27 | 111 |
| 1870 | The human papillomavirus type 16 (HPV-16) E5 protein sensitizes human keratinocytes to apoptosis induced by osmotic stress. 2002 , 21, 947-53 | 27 |
| 1869 | Downregulating PKC delta provides a PI3K/Akt-independent survival signal that overcomes apoptotic signals generated by c-Src overexpression. 2002 , 21, 1071-8 | 43 |
| 1868 | Induction and endoplasmic reticulum location of BIK/NBK in response to apoptotic signaling by E1A and p53. 2002 , 21, 2534-44 | 104 |
| 1867 | Maspin sensitizes breast carcinoma cells to induced apoptosis. 2002 , 21, 4089-98 | 111 |
| 1866 | Lack of functional pRb results in attenuated recovery of mRNA synthesis and increased apoptosis following UV radiation in human breast cancer cells. 2002 , 21, 4481-9 | 23 |
| 1865 | Chemotherapy: targeting the mitochondrial cell death pathway. 2002 , 21, 8786-803 | 350 |
| 1864 | Temporal and spatial profile of Bid cleavage after experimental traumatic brain injury. 2002 , 22, 951-8 | 31 |
| 1863 | Signal-dependent protection from apoptosis in mice expressing caspase-resistant Rb. 2002 , 4, 757-65 | 76 |
| 1862 | IAP proteins: blocking the road to death's door. 2002 , 3, 401-10 | 1499 |

| | | |
|------|---|-----|
| 1861 | Co-transduction of Apaf-1 and caspase-9 highly enhances p53-mediated apoptosis in gliomas. 2002 , 86, 587-95 | 24 |
| 1860 | Pharmacology and potential therapeutic applications of nitric oxide-releasing non-steroidal anti-inflammatory and related nitric oxide-donating drugs. 2002 , 137, 295-310 | 134 |
| 1859 | Use of fluorescently labeled caspase inhibitors as affinity labels to detect activated caspases. 2002 , 15, 1-12 | 36 |
| 1858 | The chemical biology of apoptosis. Exploring protein-protein interactions and the life and death of cells with small molecules. 2002 , 9, 1059-72 | 79 |
| 1857 | The roles of nitric oxide in dorsal root ganglion neurons. 2002 , 962, 103-10 | 45 |
| 1856 | Roles of oxidative stress and glutathione depletion in JP-8 jet fuel-induced apoptosis in rat lung epithelial cells. 2002 , 180, 92-9 | 31 |
| 1855 | Effects of prostaglandin E2 on gastric irritant-induced apoptosis. 2002 , 47, 2370-9 | 14 |
| 1854 | Effect of hypoxia on caspase-3, -8, and -9 activity and expression in the cerebral cortex of newborn piglets. 2002 , 27, 931-8 | 40 |
| 1853 | Significance of the caspase family in Helicobacter pylori induced gastric epithelial apoptosis. 2002 , 7, 367-77 | 26 |
| 1852 | Lentiviral expression of HIV-1 Vpr induces apoptosis in human neurons. 2002 , 8, 86-99 | 51 |
| 1851 | Caspase-6 gene disruption reveals a requirement for lamin A cleavage in apoptotic chromatin condensation. 2002 , 21, 1967-77 | 197 |
| 1850 | HIV-1 Tat targets microtubules to induce apoptosis, a process promoted by the pro-apoptotic Bcl-2 relative Bim. 2002 , 21, 6801-10 | 146 |
| 1849 | Apoptosis in glioma cells: review and analysis of techniques used for study with focus on the laser scanning cytometer. 2003 , 63, 129-45 | 8 |
| 1848 | Novel drug amooranin induces apoptosis through caspase activity in human breast carcinoma cell lines. 2003 , 80, 321-30 | 35 |
| 1847 | The Antiapoptotic Effect of Low-dose UVB Irradiation in NIH3T3 Cells Involves Caspase Inhibition¶. 2003 , 77, 276-283 | 5 |
| 1846 | NF-kappaB protects from the lysosomal pathway of cell death. 2003 , 22, 5313-22 | 92 |
| 1845 | Caspase-12 and endoplasmic reticulum stress mediate neurotoxicity of pathological prion protein. 2003 , 22, 5435-45 | 319 |
| 1844 | Tamoxifen and the farnesyl transferase inhibitor FTI-277 synergize to inhibit growth in estrogen receptor-positive breast tumor cell lines. 2003 , 78, 59-67 | 26 |

| | | |
|------|---|-----|
| 1843 | Paradoxical effects of a stress signal on pro- and anti-apoptotic machinery in HTLV-1 Tax expressing cells. 2003 , 245, 99-113 | 21 |
| 1842 | Studies on neuronal apoptosis in primary forebrain cultures: neuroprotective/anti-apoptotic action of NR2B NMDA antagonists. 2003 , 5, 255-64 | 16 |
| 1841 | Pharmacological evaluation of several major ingredients of Chinese herbal medicines in human hepatoma Hep3B cells. 2003 , 19, 403-12 | 65 |
| 1840 | Defects in the apoptotic machinery of cancer cells: role in drug resistance. 2003 , 13, 125-34 | 53 |
| 1839 | Cisplatin induces apoptosis in oral squamous carcinoma cells by the mitochondria-mediated but not the NF-kappaB-suppressed pathway. 2003 , 39, 282-9 | 36 |
| 1838 | H(2)O(2) generation in <i>Saccharomyces cerevisiae</i> respiratory pet mutants: effect of cytochrome c. 2003 , 35, 179-88 | 46 |
| 1837 | Apoptosis: programmed cell death at a molecular level. 2003 , 32, 345-69 | 261 |
| 1836 | Dying for NF-kappaB? Control of cell death by transcriptional regulation of the apoptotic machinery. 2003 , 15, 732-7 | 106 |
| 1835 | Role of tissue transglutaminase in GTP depletion-induced apoptosis of insulin-secreting (HIT-T15) cells. 2003 , 66, 213-23 | 14 |
| 1834 | Synergistic effects of chemotherapeutic drugs in lymphoma cells are associated with down-regulation of inhibitor of apoptosis proteins (IAPs), prostate-apoptosis-response-gene 4 (Par-4), death-associated protein (Daxx) and with enforced caspase activation. 2003 , 66, 711-24 | 40 |
| 1833 | Quercetin protects the hydrogen peroxide-induced apoptosis via inhibition of mitochondrial dysfunction in H9c2 cardiomyoblast cells. 2003 , 66, 1287-95 | 103 |
| 1832 | Selective alteration of DNA fragmentation and caspase activity in the spinal cord of aged rats and effect of dietary restriction. 2003 , 992, 137-41 | 12 |
| 1831 | Apoptosis of infiltrating T cells in the central nervous system of mice infected with Theiler's murine encephalomyelitis virus. 2003 , 315, 110-23 | 17 |
| 1830 | Involvement of cytochrome c release and caspase-3 activation in the oxidative stress-induced apoptosis in human tendon fibroblasts. 2003 , 1641, 35-41 | 124 |
| 1829 | Dexamethasone induces caspase activation in murine osteoblastic MC3T3-E1 cells. 2003 , 1642, 79-85 | 47 |
| 1828 | C-Raf controlled pathways in the protection of tumor cells from apoptosis. 2003 , 104, 425-32 | 8 |
| 1827 | The p75(NTR) tumor suppressor induces caspase-mediated apoptosis in bladder tumor cells. 2003 , 105, 47-52 | 40 |
| 1826 | Involvement of p53 in specific anti-neuroectodermal tumor activity of aloe-emodin. 2003 , 106, 836-47 | 57 |

| | | |
|------|--|-----|
| 1825 | Mitochondria-mediated caspase-independent apoptosis induced by cadmium in normal human lung cells. 2003 , 89, 335-47 | 99 |
| 1824 | NF-kappaB inhibitor sesquiterpene parthenolide induces concurrently atypical apoptosis and cell necrosis: difficulties in identification of dead cells in such cultures. 2003 , 54, 118-24 | 36 |
| 1823 | Interactions of fluorochrome-labeled caspase inhibitors with apoptotic cells: a caution in data interpretation. 2003 , 55, 50-60 | 104 |
| 1822 | Interactions among nitric oxide and Bcl-family proteins after MPP+ exposure of SH-SY5Y neural cells II: exogenous NO replicates MPP+ actions. 2003 , 72, 89-97 | 7 |
| 1821 | The role of mitochondria in nitric oxide-mediated thymocyte apoptosis. 2003 , 90, 87-91 | 9 |
| 1820 | Actions of tumor necrosis factor-alpha on oocyte maturation and embryonic development in cattle. 2003 , 50, 380-8 | 75 |
| 1819 | Mycobacterium tuberculosis virulence correlates with mitochondrial cytochrome c release in infected macrophages. 2003 , 58, 419-27 | 29 |
| 1818 | The apoptosis/necrosis transition in cerebellar granule cells depends on the mutual relationship of the antioxidant and the proteolytic systems which regulate ROS production and cytochrome c release en route to death. 2003 , 84, 960-71 | 53 |
| 1817 | CEP11004, a novel inhibitor of the mixed lineage kinases, suppresses apoptotic death in dopamine neurons of the substantia nigra induced by 6-hydroxydopamine. 2004 , 88, 469-80 | 30 |
| 1816 | Four peptides decrease the number of human pancreatic adenocarcinoma cells. 2003 , 33, 998-1005 | 35 |
| 1815 | VIP and PACAP are autocrine factors that protect the androgen-independent prostate cancer cell line PC-3 from apoptosis induced by serum withdrawal. 2003 , 139, 1050-8 | 50 |
| 1814 | A novel role for sphingolipid intermediates in activation-induced cell death in T cells. 2003 , 10, 193-202 | 19 |
| 1813 | FLIP is expressed in mouse testis and protects germ cells from apoptosis. 2003 , 10, 175-84 | 28 |
| 1812 | Potential of Fas-mediated apoptosis by attenuated production of mitochondria-derived reactive oxygen species. 2003 , 10, 335-44 | 70 |
| 1811 | Signaling and transcriptional control of Fas ligand gene expression. 2003 , 10, 36-44 | 114 |
| 1810 | Caspase-like activity in programmed nuclear death during conjugation of Tetrahymena thermophila. 2003 , 10, 634-40 | 47 |
| 1809 | Antiandrogen-induced cell death in LNCaP human prostate cancer cells. 2003 , 10, 761-71 | 46 |
| 1808 | Caspase-9 is activated in a cytochrome c-independent manner early during TNFalpha-induced apoptosis in murine cells. 2003 , 10, 1005-15 | 87 |

| | | |
|------|---|-----|
| 1807 | Distinct promoter regions regulate spatial and temporal expression of the Drosophila caspase dronc. 2003 , 10, 1348-56 | 32 |
| 1806 | Induction of mitochondrion-mediated apoptosis of CHO cells by tripchlorolide. 2003 , 13, 295-300 | 8 |
| 1805 | Mitochondria control of cell death induced by anti-HLA-DR antibodies. 2003 , 17, 1357-65 | 27 |
| 1804 | Apoptosis and melanoma chemoresistance. 2003 , 22, 3138-51 | 669 |
| 1803 | Alterations in the apoptotic machinery and their potential role in anticancer drug resistance. 2003 , 22, 7414-30 | 228 |
| 1802 | A decade of caspases. 2003 , 22, 8543-67 | 915 |
| 1801 | Mechanisms of apoptosis induction by nucleoside analogs. 2003 , 22, 9063-74 | 170 |
| 1800 | Inhibition of caspase-9 through phosphorylation at Thr 125 by ERK MAPK. 2003 , 5, 647-54 | 391 |
| 1799 | Targeting programmed cell death in neurodegenerative diseases. 2003 , 4, 365-75 | 432 |
| 1798 | Differential regulation of JNK in caspase-3-mediated apoptosis of MPP(+)-treated primary cortical neurons. 2003 , 27, 769-77 | 12 |
| 1797 | Mechanisms of CD4+ T lymphocyte cell death in human immunodeficiency virus infection and AIDS. 2003 , 84, 1649-1661 | 246 |
| 1796 | Coculture of human oviductal cells maintains mitochondrial function and decreases caspase activity of cleavage-stage mouse embryos. 2003 , 80, 178-83 | 14 |
| 1795 | Flow cytometry of apoptosis. 2004 , Chapter 18, Unit 18.8 | 17 |
| 1794 | Apoptosis in the human ovary. 2003 , 6, 24-35 | 49 |
| 1793 | Modification of Radiation Response. 2003 , | 5 |
| 1792 | The apoptosis-necrosis continuum: insights from genetically altered mice. 2003 , 40, 481-95 | 154 |
| 1791 | The protective effect of fermented milk kefir on radiation-induced apoptosis in colonic crypt cells of rats. 2003 , 44, 111-5 | 29 |
| 1790 | Apoptosis-mediated selective killing of malignant cells by cardiac steroids: maintenance of cytotoxicity and loss of cardiac activity of chemically modified derivatives. 2003 , 3, 1791-801 | 41 |

| | | |
|------|---|-----|
| 1789 | Rhein induces apoptosis in HL-60 cells via reactive oxygen species-independent mitochondrial death pathway. 2003 , 418, 99-107 | 105 |
| 1788 | Apoptosis-resistance of hypoxic cells: multiple factors involved and a role for IAP-2. 2003 , 163, 663-71 | 81 |
| 1787 | Caspase 3-mediated proteolysis of the N-terminal cytoplasmic domain of the human erythroid anion exchanger 1 (band 3). 2003 , 278, 52551-8 | 86 |
| 1786 | Role of apoptosis-inducing factor in myocardial cell death by ischemia-reperfusion. 2003 , 309, 619-24 | 65 |
| 1785 | Wheat gliadin induces apoptosis of intestinal cells via an autocrine mechanism involving Fas-Fas ligand pathway. 2003 , 540, 117-24 | 53 |
| 1784 | Measuring dynamics of caspase-8 activation in a single living HeLa cell during TNFalpha-induced apoptosis. 2003 , 304, 217-22 | 50 |
| 1783 | Role of inherited defects decreasing Fas function in autoimmunity. 2003 , 72, 2803-24 | 40 |
| 1782 | Apoptosis and brain ischaemia. 2003 , 27, 267-82 | 219 |
| 1781 | Caspase-independent apoptosis induced by evening primrose extract in Ehrlich ascites tumor cells. 2003 , 201, 9-16 | 24 |
| 1780 | Dieldrin induces apoptosis by promoting caspase-3-dependent proteolytic cleavage of protein kinase Cdelta in dopaminergic cells: relevance to oxidative stress and dopaminergic degeneration. 2003 , 119, 945-64 | 138 |
| 1779 | Inhibition of mitochondrial permeability transition prevents mitochondrial dysfunction, cytochrome c release and apoptosis induced by heart ischemia. 2003 , 35, 357-66 | 157 |
| 1778 | Bcl-2 family members make different contributions to cell death in hypoxia and/or hyperoxia in rat cerebral cortex. 2003 , 21, 371-7 | 34 |
| 1777 | Ara-C induces apoptosis in monkey fibroblast cells. 2003 , 17, 367-73 | 13 |
| 1776 | Cyclosporin A inhibits thyroid hormone-induced shortening of the tadpole tail through membrane permeability transition. 2003 , 135, 473-83 | 19 |
| 1775 | Mechanism of XIAP-mediated inhibition of caspase-9. 2003 , 11, 519-27 | 566 |
| 1774 | Sonic hedgehog is required for progenitor cell maintenance in telencephalic stem cell niches. 2003 , 39, 937-50 | 590 |
| 1773 | The evolution of cell death programs as prerequisites of multicellularity. 2003 , 543, 235-49 | 55 |
| 1772 | Platelet apoptosis in stored platelet concentrates and other models. 2003 , 28, 285-95 | 94 |

| | | |
|------|---|-----|
| 1771 | Caspases, apoptosis and aging. 2003 , 2, 357-66 | 88 |
| 1770 | Contribution of caspase-8 to apoptosis of axotomized rat retinal ganglion cells in vivo. 2003 , 13, 124-35 | 48 |
| 1769 | Induction of apoptosis by sphingoid long-chain bases in <i>Aspergillus nidulans</i> . 2003 , 23, 163-77 | 124 |
| 1768 | Essentials of Apoptosis. 2003 , | 3 |
| 1767 | Flow cytometry of apoptosis. 2003 , Chapter 7, Unit 7.19 | 17 |
| 1766 | In vitro anticancer activities of <i>Leonurus heterophyllus</i> sweet (Chinese motherwort herb). 2003 , 9, 511-8 | 17 |
| 1765 | Role and gonadotrophic regulation of X-linked inhibitor of apoptosis protein expression during rat ovarian follicular development in vitro. 2003 , 68, 610-9 | 41 |
| 1764 | Significant neuroprotection against ischemic brain injury by inhibition of the MEK1 protein kinase in mice: exploration of potential mechanism associated with apoptosis. 2003 , 304, 172-8 | 103 |
| 1763 | A novel domain in adenovirus L4-100K is required for stable binding and efficient inhibition of human granzyme B: possible interaction with a species-specific exosite. 2003 , 23, 6315-26 | 26 |
| 1762 | Anoxia and reoxygenation of human endothelial cells decrease ceramide glucosyltransferase expression and activates caspases. 2003 , 17, 723-4 | 13 |
| 1761 | Nuclear factor kappa B protects against host cell apoptosis during <i>Rickettsia rickettsii</i> infection by inhibiting activation of apical and effector caspases and maintaining mitochondrial integrity. 2003 , 71, 4127-36 | 57 |
| 1760 | Inhibition of caspase activation and a requirement for NF-kappaB function in the <i>Toxoplasma gondii</i> -mediated blockade of host apoptosis. 2003 , 116, 4345-58 | 105 |
| 1759 | A novel mechanism for the immunomodulatory functions of class II MHC-derived peptides. 2003 , 14, 1053-65 | 7 |
| 1758 | Central role of Fas-associated death domain protein in apoptosis induction by the mitogen-activated protein kinase kinase inhibitor CI-1040 (PD184352) in acute lymphocytic leukemia cells in vitro. 2003 , 278, 47326-39 | 49 |
| 1757 | Death inducer-obliterator 1 triggers apoptosis after nuclear translocation and caspase upregulation. 2003 , 23, 3216-25 | 33 |
| 1756 | Delineation of the molecular mechanisms of <i>Francisella tularensis</i> -induced apoptosis in murine macrophages. 2003 , 71, 4642-6 | 82 |
| 1755 | Caspase-mediated cleavage of the feline calicivirus capsid protein. 2003 , 84, 1237-1244 | 33 |
| 1754 | Salicylate enhances necrosis and apoptosis mediated by the mitochondrial permeability transition. 2003 , 73, 44-52 | 36 |

| | | |
|------|--|-----|
| 1753 | KDBI: Kinetic Data of Bio-molecular Interactions database. 2003 , 31, 255-7 | 29 |
| 1752 | Lipopolysaccharides indirectly stimulate apoptosis and global induction of apoptotic genes in fibroblasts. 2003 , 278, 52901-8 | 46 |
| 1751 | Uncoupling cell shrinkage from apoptosis reveals that Na ⁺ influx is required for volume loss during programmed cell death. 2003 , 278, 39176-84 | 150 |
| 1750 | The major apoptotic pathway activated and suppressed by poliovirus. 2003 , 77, 45-56 | 73 |
| 1749 | Fibrillogenic amylin evokes islet beta-cell apoptosis through linked activation of a caspase cascade and JNK1. 2003 , 278, 52810-9 | 84 |
| 1748 | Antagonistic control of oxidative stress-induced cell death in Arabidopsis by two related, plant-specific zinc finger proteins. 2003 , 100, 6831-6 | 140 |
| 1747 | Impaired germinal center maturation in adenosine deaminase deficiency. 2003 , 171, 5562-70 | 35 |
| 1746 | Nitric oxide-mediated inhibition of caspase-dependent T lymphocyte proliferation. 2003 , 74, 403-11 | 19 |
| 1745 | Activation of pro-apoptotic cascade by dopamine in renal epithelial cells is fully dependent on hydrogen peroxide generation by monoamine oxidases. 2003 , 14, 855-62 | 51 |
| 1744 | The nuclear lamina and its functions in the nucleus. 2003 , 226, 1-62 | 168 |
| 1743 | Essential role for caspase 8 in T-cell homeostasis and T-cell-mediated immunity. 2003 , 17, 883-95 | 359 |
| 1742 | Sulforaphane induces caspase-mediated apoptosis in cultured PC-3 human prostate cancer cells and retards growth of PC-3 xenografts in vivo. 2004 , 25, 83-90 | 272 |
| 1741 | Alternative programs of cell death in developing retinal tissue. 2003 , 278, 41938-46 | 58 |
| 1740 | Pancreatic-derived factor (FAM3B), a novel islet cytokine, induces apoptosis of insulin-secreting beta-cells. 2003 , 52, 2296-303 | 61 |
| 1739 | Death receptor-induced activation of initiator caspase 8 is antagonized by serine/threonine kinase PAK4. 2003 , 23, 7838-48 | 79 |
| 1738 | Caspase cleavage product of BAP31 induces mitochondrial fission through endoplasmic reticulum calcium signals, enhancing cytochrome c release to the cytosol. 2003 , 160, 1115-27 | 442 |
| 1737 | Proteome analysis of vinca alkaloid response and resistance in acute lymphoblastic leukemia reveals novel cytoskeletal alterations. 2003 , 278, 45082-93 | 68 |
| 1736 | Inhibition of transcription factor Stat5 induces cell death of human prostate cancer cells. 2003 , 278, 27287-92 | 105 |

| | | |
|------|--|-----|
| 1735 | Loss of HSulf-1 up-regulates heparin-binding growth factor signaling in cancer. 2003 , 278, 23107-17 | 195 |
| 1734 | Phosphorylation-regulated cleavage of the tumor suppressor PTEN by caspase-3: implications for the control of protein stability and PTEN-protein interactions. 2003 , 278, 30652-60 | 107 |
| 1733 | Mitochondrially localized active caspase-9 and caspase-3 result mostly from translocation from the cytosol and partly from caspase-mediated activation in the organelle. Lack of evidence for Apaf-1-mediated procaspase-9 activation in the mitochondria. 2003 , 278, 17408-20 | 57 |
| 1732 | Pro-apoptotic activity of HIV-1 auxiliary regulatory protein Vpr is subtype-dependent and potently enhanced by nonconservative changes of the leucine residue at position 64. 2003 , 278, 44326-30 | 21 |
| 1731 | Bcl-xL overexpression blocks bax-mediated mitochondrial contact site formation and apoptosis in rod photoreceptors of lead-exposed mice. 2003 , 100, 1022-7 | 94 |
| 1730 | Overexpression of interferon-gamma-inducible GTPase inhibits coxsackievirus B3-induced apoptosis through the activation of the phosphatidylinositol 3-kinase/Akt pathway and inhibition of viral replication. 2003 , 278, 33011-9 | 52 |
| 1729 | Uncleaved BAP31 in association with A4 protein at the endoplasmic reticulum is an inhibitor of Fas-initiated release of cytochrome c from mitochondria. 2003 , 278, 14461-8 | 56 |
| 1728 | Hyperphosphorylation of a mitochondrial protein, prohibitin, is induced by calyculin A in a rice lesion-mimic mutant cdr1. 2003 , 132, 1861-9 | 52 |
| 1727 | Proteinases and their inhibitors in the immune system. 2003 , 222, 197-236 | 12 |
| 1726 | Inactive caspase 3 activates Akt in human leukemia cells susceptible or resistant to apoptosis induced by phorbol ester. 2003 , 22, 1111 | 1 |
| 1725 | Astrocytic gap junctions composed of connexin 43 reduce apoptotic neuronal damage in cerebral ischemia. 2003 , 34, 1987-93 | 171 |
| 1724 | A Primer on Biology of Hair Cell Regeneration, Rescue, and Repair. 2003 , 24, 099-110 | 1 |
| 1723 | Sustained apoptosis in human cardiac allografts despite histologic resolution of rejection. 2003 , 76, 859-64 | 14 |
| 1722 | LPA protects intestinal epithelial cells from apoptosis by inhibiting the mitochondrial pathway. 2003 , 284, G821-9 | 60 |
| 1721 | Regulation of necrosis of H9c2 myogenic cells upon transient energy deprivation. Rapid deenergization of mitochondria precedes necrosis and is controlled by reactive oxygen species, stress kinase JNK, HSP72 and ARC. 2003 , 278, 50483-96 | 51 |
| 1720 | Vitamin C inhibits FAS-induced apoptosis in monocytes and U937 cells. 2003 , 102, 336-43 | 99 |
| 1719 | The anti-apoptotic response of the Gq/11-coupled muscarinic receptor family. 2003 , 31, 1182-5 | 35 |
| 1718 | Regulation of neutrophil apoptosis. 2003 , 83, 204-24 | 31 |

| | | |
|------|---|-----|
| 1717 | Regulation of cell death and cell survival gene expression during ovarian follicular development and atresia. 2003 , 8, d222-37 | 124 |
| 1716 | Molecular mechanisms of irradiation-induced apoptosis. 2003 , 8, d9-19 | 34 |
| 1715 | Structure and function of HIV-1 auxiliary regulatory protein Vpr: novel clues to drug design. 2004 , 4, 265-75 | 3 |
| 1714 | Lipid signaling in CD95-mediated apoptosis. 2002 , 36, 285-308 | 1 |
| 1713 | Morphology, molecular regulation and significance of apoptosis in pituitary adenomas. 2004 , 32, 217-34 | 6 |
| 1712 | Targeting endogenous inhibitors of apoptosis for treatment of cancer, stroke and multiple sclerosis. 2004 , 8, 241-53 | 4 |
| 1711 | Differentiation-dependent sensitivity to apoptogenic factors in PC12 cells. 2004 , 279, 30983-93 | 31 |
| 1710 | Epidermal growth factor triggers an original, caspase-independent pituitary cell death with heterogeneous phenotype. 2004 , 15, 4938-48 | 35 |
| 1709 | Activation of intrinsic and extrinsic proapoptotic signaling pathways in interleukin-18-mediated human cardiac endothelial cell death. 2004 , 279, 20221-33 | 94 |
| 1708 | Sodium 4-phenylbutyrate protects against cerebral ischemic injury. 2004 , 66, 899-908 | 226 |
| 1707 | Doxorubicin inhibits DNMT1, resulting in conditional apoptosis. 2004 , 66, 1415-20 | 83 |
| 1706 | Cloning of a novel Apaf-1-interacting protein: a potent suppressor of apoptosis and ischemic neuronal cell death. 2004 , 24, 6189-201 | 60 |
| 1705 | Inhibition of apoptosis by Escherichia coli K1 is accompanied by increased expression of BclXL and blockade of mitochondrial cytochrome c release in macrophages. 2004 , 72, 6012-22 | 40 |
| 1704 | Partial cleavage of RasGAP by caspases is required for cell survival in mild stress conditions. 2004 , 24, 10425-36 | 69 |
| 1703 | Granzyme B-induced cell death. 2004 , 111, 28-41 | 36 |
| 1702 | Short-term delay of Fas-stimulated apoptosis by GM-CSF as a result of temporary suppression of FADD recruitment in neutrophils: evidence implicating phosphatidylinositol 3-kinase and MEK1-ERK1/2 pathways downstream of classical protein kinase C. 2004 , 76, 1047-56 | 23 |
| 1701 | Components of the cell death machine and drug sensitivity of the National Cancer Institute Cell Line Panel. 2004 , 10, 6807-20 | 57 |
| 1700 | Caspase-2 and caspase-7 are involved in cytolethal distending toxin-induced apoptosis in Jurkat and MOLT-4 T-cell lines. 2004 , 72, 871-9 | 55 |

| | | |
|------|---|-----|
| 1699 | Early single cell bifurcation of pro- and antiapoptotic states during oxidative stress. 2004 , 279, 27494-501 | 75 |
| 1698 | Minocycline up-regulates Bcl-2 and protects against cell death in mitochondria. 2004 , 279, 19948-54 | 203 |
| 1697 | Selective modulation of the therapeutic efficacy of anticancer drugs by selenium containing compounds against human tumor xenografts. 2004 , 10, 2561-9 | 178 |
| 1696 | Apoptotic effects of LPS on fibroblasts are indirectly mediated through TNFR1. 2004 , 83, 671-6 | 24 |
| 1695 | Contagious apoptosis facilitated by the HIV-1 envelope: fusion-induced cell-to-cell transmission of a lethal signal. 2004 , 117, 5643-53 | 22 |
| 1694 | VIAF, a conserved inhibitor of apoptosis (IAP)-interacting factor that modulates caspase activation. 2004 , 279, 51091-9 | 19 |
| 1693 | The HPV-16 E5 protein inhibits TRAIL- and FasL-mediated apoptosis in human keratinocyte raft cultures. 2004 , 47, 48-56 | 47 |
| 1692 | Beta-actin is required for mitochondria clustering and ROS generation in TNF-induced, caspase-independent cell death. 2004 , 117, 4673-80 | 52 |
| 1691 | Caspase-3 expression in human gastric carcinoma and its clinical significance. 2004 , 66, 201-9 | 27 |
| 1690 | Loss of caspase-8 activation pathway is a possible mechanism for CDDP resistance in human laryngeal squamous cell carcinoma, HEP-2 cells. 2004 , 25, 721 | 1 |
| 1689 | Carbon monoxide inhibits T lymphocyte proliferation via caspase-dependent pathway. 2004 , 172, 1220-6 | 98 |
| 1688 | Multiple myeloma regression mediated by bruceantin. 2004 , 10, 1170-9 | 47 |
| 1687 | Caspase-2 can function upstream of bid cleavage in the TRAIL apoptosis pathway. 2004 , 279, 35047-52 | 92 |
| 1686 | Hypoxia selection of death-resistant cells. A role for Bcl-X(L). 2004 , 279, 9215-21 | 74 |
| 1685 | Nerve growth factor withdrawal-mediated apoptosis in naive and differentiated PC12 cells through p53/caspase-3-dependent and -independent pathways. 2004 , 279, 15604-14 | 28 |
| 1684 | Caspase-7 gene disruption reveals an involvement of the enzyme during the early stages of apoptosis. 2004 , 279, 1030-9 | 31 |
| 1683 | Effects of injury severity on regional and temporal mRNA expression levels of calpains and caspases after traumatic brain injury in rats. 2004 , 21, 829-41 | 25 |
| 1682 | Tula hantavirus infection of Vero E6 cells induces apoptosis involving caspase 8 activation. 2004 , 85, 3261-3268 | 43 |

| | | |
|------|--|------|
| 1681 | Bid-cardiolipin interaction at mitochondrial contact site contributes to mitochondrial cristae reorganization and cytochrome C release. 2004 , 15, 3061-72 | 149 |
| 1680 | The <i>Caenorhabditis elegans</i> pvl-5 gene protects hypodermal cells from ced-3-dependent, ced-4-independent cell death. 2004 , 167, 673-85 | 10 |
| 1679 | Ceramidases in the regulation of ceramide levels and function. 2002 , 36, 187-205 | 43 |
| 1678 | Diosgenin-3-O-alpha-L-rhamnopyranosyl-(1 --> 4)-beta-D-glucopyranoside obtained as a new anticancer agent from <i>Dioscorea futschauensis</i> induces apoptosis on human colon carcinoma HCT-15 cells via mitochondria-controlled apoptotic pathway. 2004 , 6, 115-25 | 30 |
| 1677 | Upstream regulatory role for XIAP in receptor-mediated apoptosis. 2004 , 24, 7003-14 | 92 |
| 1676 | Bid activation in kidney cells following ATP depletion in vitro and ischemia in vivo. 2004 , 286, F803-9 | 36 |
| 1675 | Characterisation of Mcl-1 cleavage during apoptosis of haematopoietic cells. 2004 , 125, 655-65 | 67 |
| 1674 | Mitochondrial dysfunction is a primary event in renal cell oxalate toxicity. 2004 , 66, 1890-900 | 85 |
| 1673 | NF- κ B activation suppresses host cell apoptosis during <i>Rickettsia rickettsii</i> infection via regulatory effects on intracellular localization or levels of apoptogenic and anti-apoptotic proteins. 2004 , 234, 333-341 | 40 |
| 1672 | Pathways of apoptotic and non-apoptotic death in tumour cells. 2004 , 4, 592-603 | 851 |
| 1671 | Fluorescent probes for proteolysis: tools for drug discovery. 2004 , 3, 58-69 | 91 |
| 1670 | Molecular mechanisms of caspase regulation during apoptosis. 2004 , 5, 897-907 | 1456 |
| 1669 | Apoptosis to necrosis switching downstream of apoptosome formation requires inhibition of both glycolysis and oxidative phosphorylation in a BCL-X(L)- and PKB/AKT-independent fashion. 2004 , 11, 342-53 | 26 |
| 1668 | Involvement of cell cycle progression in survival signaling through CD40 in the B-lymphocyte line WEHI-231. 2004 , 11, 261-9 | 12 |
| 1667 | Catalytic activity of caspase-3 is required for its degradation: stabilization of the active complex by synthetic inhibitors. 2004 , 11, 439-47 | 69 |
| 1666 | A mechanism for the proapoptotic activity of ursodeoxycholic acid: effects on Bcl-2 conformation. 2004 , 11, 906-14 | 24 |
| 1665 | Differential DNases are selectively used in neuronal apoptosis depending on the differentiation state. 2004 , 11, 1112-20 | 23 |
| 1664 | AIF deficiency compromises oxidative phosphorylation. 2004 , 23, 4679-89 | 522 |

| | | |
|------|--|-----|
| 1663 | PKC alpha mediates chemoresistance in acute lymphoblastic leukemia through effects on Bcl2 phosphorylation. 2004 , 18, 505-12 | 57 |
| 1662 | Apoptosis defects and chemotherapy resistance: molecular interaction maps and networks. 2004 , 23, 2934-49 | 475 |
| 1661 | Targets and mechanisms for the regulation of translation in malignant transformation. 2004 , 23, 3180-8 | 170 |
| 1660 | Death receptors in chemotherapy and cancer. 2004 , 23, 2950-66 | 408 |
| 1659 | Deacetylation of p53 after nerve growth factor treatment in PC12 cells as a post-translational modification mechanism of neurotrophin-induced tumor suppressor activation. 2004 , 23, 8078-87 | 22 |
| 1658 | Crystal structures of arginine deiminase with covalent reaction intermediates; implications for catalytic mechanism. 2004 , 12, 657-67 | 81 |
| 1657 | Endothelial cells protect against lipopolysaccharide-induced caspase-3-mediated pericyte apoptosis in a coculture system. 2004 , 136, 317-22 | 7 |
| 1656 | Perillyl alcohol-mediated inhibition of lung cancer cell line proliferation: potential mechanisms for its chemotherapeutic effects. 2004 , 195, 232-46 | 42 |
| 1655 | Neurotoxicity of amphetamine derivatives is mediated by caspase pathway activation in rat cerebellar granule cells. 2004 , 196, 223-34 | 86 |
| 1654 | Caspases, IAPs and Smac/DIABLO: mechanisms from structural biology. 2004 , 29, 486-94 | 182 |
| 1653 | Signal transduction pathways leading to cell cycle arrest and apoptosis induction in cancer cells by Allium vegetable-derived organosulfur compounds: a review. 2004 , 555, 121-31 | 119 |
| 1652 | Genealogy, expression, and molecular mechanisms in apoptosis. 2004 , 101, 1-15 | 39 |
| 1651 | Retinal ischemia: mechanisms of damage and potential therapeutic strategies. 2004 , 23, 91-147 | 743 |
| 1650 | Avian encephalomyelitis virus nonstructural protein 2C induces apoptosis by activating cytochrome c/caspase-9 pathway. 2004 , 318, 169-82 | 30 |
| 1649 | SMAC is expressed de novo in a subset of cervical cancer tumors. 2004 , 4, 84 | 10 |
| 1648 | Investigation of extrinsic and intrinsic apoptosis pathways of new clerodane diterpenoids in human prostate cancer PC-3 cells. 2004 , 503, 17-24 | 37 |
| 1647 | Nutritional supplementation with mixed essential amino acids enhances myocyte survival, preserving mitochondrial functional capacity during ischemia-reperfusion injury. 2004 , 93, 35A-40A | 15 |
| 1646 | Immunohistochemical analysis of Bcl-2 and Bax oncoproteins in rabbit craniomandibular joint. 2004 , 49, 143-8 | 9 |

| | | |
|------|--|-----|
| 1645 | Overexpression of heme oxygenase (HO)-1 renders Jurkat T cells resistant to fas-mediated apoptosis: involvement of iron released by HO-1. 2004 , 36, 858-71 | 59 |
| 1644 | Increased GADD153 gene expression during iron chelation-induced apoptosis in Jurkat T-lymphocytes. 2004 , 1691, 41-50 | 15 |
| 1643 | Disruption of mitochondria during tocotrienol-induced apoptosis in MDA-MB-231 human breast cancer cells. 2004 , 67, 315-24 | 115 |
| 1642 | Mechanism of mahanine-induced apoptosis in human leukemia cells (HL-60). 2004 , 67, 41-51 | 56 |
| 1641 | Synthetic 1,4-anthracenedione analogs induce cytochrome c release, caspase-9, -3, and -8 activities, poly(ADP-ribose) polymerase-1 cleavage and internucleosomal DNA fragmentation in HL-60 cells by a mechanism which involves caspase-2 activation but not Fas signaling. 2004 , 67, 523-37 | 26 |
| 1640 | Novel N-thiolated beta-lactam antibiotics selectively induce apoptosis in human tumor and transformed, but not normal or nontransformed, cells. 2004 , 67, 365-74 | 60 |
| 1639 | Apoptotic injury in cultured human hepatocytes induced by HMG-CoA reductase inhibitors. 2004 , 67, 2175-86 | 77 |
| 1638 | A novel bis-benzylidenecyclopentanone derivative, BPR0Y007, inducing a rapid caspase activation involving upregulation of Fas (CD95/APO-1) and wild-type p53 in human oral epidermoid carcinoma cells. 2004 , 68, 293-303 | 13 |
| 1637 | ACYP1 gene possesses two alternative splicing forms that induce apoptosis. 2004 , 56, 29-33 | 2 |
| 1636 | Induction of apoptosis by tumor cell-targeted toxins. 2004 , 9, 19-25 | 25 |
| 1635 | Stress-induced apoptosis: toward a symmetry with receptor-mediated cell death. 2004 , 9, 77-82 | 49 |
| 1634 | LPS-induced apoptosis is dependent upon mitochondrial dysfunction. 2004 , 9, 467-74 | 31 |
| 1633 | Apoptosome dysfunction in human cancer. 2004 , 9, 691-704 | 207 |
| 1632 | Functions of p21Waf1 in Norm and in Stress. 2004 , 38, 309-321 | 2 |
| 1631 | Transgenic mice overexpressing glutathione peroxidase 4 are protected against oxidative stress-induced apoptosis. 2004 , 279, 55137-46 | 172 |
| 1630 | Parkin protects human dopaminergic neuroblastoma cells against dopamine-induced apoptosis. 2004 , 13, 1745-54 | 200 |
| 1629 | Mitochondrial transmembrane potential is diminished in phorbol myristate acetate-stimulated peritoneal resident macrophages isolated from wild-type mice, but not in those from gp91-phox-deficient mice. 2004 , 122, 323-32 | 10 |
| 1628 | Immunohistochemical distribution of proteins belonging to the receptor-mediated and the mitochondrial apoptotic pathways in human placenta during gestation. 2004 , 318, 599-608 | 25 |

| | | |
|------|---|----|
| 1627 | Two 14-epi analogues of 1,25-dihydroxyvitamin D3 protect human keratinocytes against the effects of UVB. 2004 , 295, 527-34 | 26 |
| 1626 | AZT inhibits Visna/maedi virus-induced apoptosis. 2004 , 149, 583-601 | 4 |
| 1625 | Marine alkaloid polycarpine and its synthetic derivative dimethylpolycarpine induce apoptosis in JB6 cells through p53- and caspase 3-dependent pathways. 2004 , 21, 2307-19 | 25 |
| 1624 | Neuroprotection by pergolide against levodopa-induced cytotoxicity of neural stem cells. 2004 , 29, 2207-14 | 10 |
| 1623 | Mechanistic and antineoplastic evaluation of taurolidine in the DU145 model of human prostate cancer. 2004 , 54, 249-58 | 25 |
| 1622 | Binding and release of cytochrome c in brain mitochondria is influenced by membrane potential and hydrophobic interactions with cardiolipin. 2004 , 198, 43-53 | 25 |
| 1621 | 15-deoxy-delta 12, 14-Prostaglandin J2 prevents reactive oxygen species generation and mitochondrial membrane depolarization induced by oxidative stress. 2004 , 4, 6 | 35 |
| 1620 | Focal caspase activation underlies the endplate myopathy in slow-channel syndrome. 2004 , 55, 347-52 | 29 |
| 1619 | Cdk2 activation acts upstream of the mitochondrion during glucocorticoid induced thymocyte apoptosis. 2004 , 34, 2781-90 | 21 |
| 1618 | Calpain activity in the amikacin-damaged rat cochlea. 2004 , 477, 149-60 | 27 |
| 1617 | Targeting and amplification of immune killing of tumor cells by pro-Smac. 2004 , 109, 85-94 | 7 |
| 1616 | Inhibitory effects of evodiamine on the growth of human prostate cancer cell line LNCaP. 2004 , 110, 641-51 | 64 |
| 1615 | Mechanism of taxol-induced apoptosis in human SKOV3 ovarian carcinoma cells. 2004 , 91, 1043-52 | 57 |
| 1614 | Role of caspases in the regulation of apoptotic pancreatic islet beta-cells death. 2004 , 200, 177-200 | 81 |
| 1613 | Different roles of ERK and p38 MAP kinases during tube formation from endothelial cells cultured in 3-dimensional collagen matrices. 2004 , 200, 360-9 | 52 |
| 1612 | TNF-alpha in vivo stimulates apoptosis in fibroblasts through caspase-8 activation and modulates the expression of pro-apoptotic genes. 2004 , 201, 341-8 | 49 |
| 1611 | N-nitroso metabolite of carbofuran induces apoptosis in CHL cells by cytochrome c-mediated activation of caspases. 2004 , 201, 51-8 | 11 |
| 1610 | Involvement of cytochrome c release and caspase activation in toosendanin-induced PC12 cell apoptosis. 2004 , 201, 31-8 | 30 |

| | | |
|------|---|-----|
| 1609 | Apoptotic markers in cancer. 2004 , 37, 605-17 | 94 |
| 1608 | Isolation and characterization of mammalian cells that are undergoing apoptosis by a bovine serum albumin density gradient. 2004 , 332, 226-33 | 2 |
| 1607 | Methyl selenium-induced vascular endothelial apoptosis is executed by caspases and principally mediated by p38 MAPK pathway. 2004 , 49, 174-83 | 39 |
| 1606 | Antitumor activity of bruceantin: an old drug with new promise. 2004 , 67, 269-72 | 79 |
| 1605 | Direct interaction of Smac with NADE promotes TRAIL-induced apoptosis. 2004 , 319, 649-649 | |
| 1604 | Echinocystic acid induces apoptosis in HL-60 cells through mitochondria-mediated death pathway. 2004 , 212, 21-21 | |
| 1603 | Cryopreservation and thawing is associated with varying extent of activation of apoptotic machinery in subsets of ejaculated human spermatozoa. 2004 , 71, 1828-37 | 192 |
| 1602 | Rotenone-induced apoptosis is mediated by p38 and JNK MAP kinases in human dopaminergic SH-SY5Y cells. 2004 , 79, 137-46 | 121 |
| 1601 | Nuclear mechanisms of hypoxic cerebral injury in the newborn. 2004 , 31, 91-105 | 15 |
| 1600 | Impaired clearance of virus-infected hepatocytes in transgenic mice expressing the hepatitis C virus polyprotein. 2004 , 126, 859-72 | 58 |
| 1599 | Caspase activation, inhibition, and reactivation: a mechanistic view. 2004 , 13, 1979-87 | 222 |
| 1598 | Mechanism of cell death during infectious salmon anemia virus infection is cell type-specific. 2004 , 85, 3027-3036 | 33 |
| 1597 | Cytometric methods to detect apoptosis. 2004 , 75, 307-41 | 31 |
| 1596 | Cell death pathways in pancreatitis and pancreatic cancer. 2004 , 4, 567-86 | 115 |
| 1595 | Peroxiredoxin III, a mitochondrion-specific peroxidase, regulates apoptotic signaling by mitochondria. 2004 , 279, 41975-84 | 300 |
| 1594 | Methylene chloride fraction of <i>Scutellaria barbata</i> induces apoptosis in human U937 leukemia cells via the mitochondrial signaling pathway. 2004 , 348, 41-8 | 53 |
| 1593 | Raf kinase inhibitor protein: a prostate cancer metastasis suppressor gene. 2004 , 207, 131-7 | 68 |
| 1592 | Echinocystic acid induces apoptosis in HL-60 cells through mitochondria-mediated death pathway. 2004 , 212, 21-32 | 59 |

| | | |
|------|---|-----|
| 1591 | Spatial and temporal gene expression profiling of the contused rat spinal cord. 2004 , 189, 204-21 | 81 |
| 1590 | Baicalein induced in vitro apoptosis undergo caspases activity in human promyelocytic leukemia HL-60 cells. 2004 , 42, 37-43 | 42 |
| 1589 | Aloe-emodin induced in vitro G2/M arrest of cell cycle in human promyelocytic leukemia HL-60 cells. 2004 , 42, 1251-7 | 91 |
| 1588 | Effects of glycolic acid on the induction of apoptosis via caspase-3 activation in human leukemia cell line (HL-60). 2004 , 42, 1777-84 | 9 |
| 1587 | NF-kappaB activation suppresses host cell apoptosis during Rickettsia rickettsii infection via regulatory effects on intracellular localization or levels of apoptogenic and anti-apoptotic proteins. 2004 , 234, 333-41 | 44 |
| 1586 | The possible role of cytochrome c oxidase in stress-induced apoptosis and degenerative diseases. 2004 , 1655, 400-8 | 175 |
| 1585 | Complestatin prevents apoptotic cell death: inhibition of a mitochondrial caspase pathway through AKT/PKB activation. 2004 , 313, 193-204 | 15 |
| 1584 | Direct interaction of Smac with NADE promotes TRAIL-induced apoptosis. 2004 , 319, 649-54 | 21 |
| 1583 | Apo cytochrome c inhibits caspases by preventing apoptosome formation. 2004 , 319, 944-50 | 29 |
| 1582 | A novel inhibitor that protects apoptotic DNA fragmentation catalyzed by DNase gamma. 2004 , 325, 1292-7 | 17 |
| 1581 | Apoptosis and involution in the mammary gland are altered in mice lacking a novel receptor, beta1,4-Galactosyltransferase I. 2004 , 272, 286-309 | 11 |
| 1580 | Fibroblast growth factor-2 induces osteoblast survival through a phosphatidylinositol 3-kinase-dependent, -beta-catenin-independent signaling pathway. 2004 , 297, 235-46 | 67 |
| 1579 | Catalpol inhibits apoptosis in hydrogen peroxide-induced PC12 cells by preventing cytochrome c release and inactivating of caspase cascade. 2004 , 43, 53-9 | 81 |
| 1578 | Cell cycle regulation of neuronal apoptosis in development and disease. 2004 , 72, 1-25 | 245 |
| 1577 | Astrocyte apoptosis: implications for neuroprotection. 2004 , 72, 111-27 | 360 |
| 1576 | Persistent proteinuria up-regulates angiotensin II type 2 receptor and induces apoptosis in proximal tubular cells. 2004 , 164, 1817-26 | 49 |
| 1575 | Increased apoptosis and inflammation after focal brain ischemia in mice lacking connexin43 in astrocytes. 2004 , 164, 2067-75 | 192 |
| 1574 | Pathway of apoptosis induced in Jurkat T lymphoblasts by anti-HLA class I antibodies. 2004 , 65, 189-99 | 6 |

| | | |
|------|--|------|
| 1573 | Neuronal trauma model: in search of Thanatos. 2004 , 22, 485-96 | 27 |
| 1572 | Superoxide-induced apoptosis of activated rat hepatic stellate cells. 2004 , 41, 567-75 | 32 |
| 1571 | Involvement of reactive oxygen species-independent mitochondrial pathway in gossypol-induced apoptosis. 2004 , 428, 179-87 | 45 |
| 1570 | Estradiol abrogates apoptosis in breast cancer cells through inactivation of BAD: Ras-dependent nongenomic pathways requiring signaling through ERK and Akt. 2004 , 15, 3266-84 | 104 |
| 1569 | Apoptotic and autophagic cell death induced by histone deacetylase inhibitors. 2004 , 101, 18030-5 | 515 |
| 1568 | Novel di-2-pyridyl-derived iron chelators with marked and selective antitumor activity: in vitro and in vivo assessment. 2004 , 104, 1450-8 | 314 |
| 1567 | Cytochrome C-mediated apoptosis. 2004 , 73, 87-106 | 1070 |
| 1566 | Glutathione-S-transferase A4-4 modulates oxidative stress in endothelium: possible role in human atherosclerosis. 2004 , 173, 211-21 | 69 |
| 1565 | Caspase 3 inhibition improves survival and reduces early graft injury after ischemia and reperfusion in rat liver transplantation. 2004 , 78, 1267-73 | 42 |
| 1564 | Molecular biology of sarcomas: update-the cell cycle paradigm. 2004 , 15, 456-467 | 3 |
| 1563 | Mechanism targeted discovery of antitumor marine natural products. 2004 , 11, 1725-56 | 60 |
| 1562 | Detection of mitochondrial caspase activity in real time in situ in live cells. 2004 , 10, 442-8 | 6 |
| 1561 | Antitumor triptycene bisquinones induce a caspase-independent release of mitochondrial cytochrome c and a caspase-2-mediated activation of initiator caspase-8 and -9 in HL-60 cells by a mechanism which does not involve Fas signaling. 2004 , 15, 929-46 | 18 |
| 1560 | Caspases, the enemy within, and their role in oxidative stress-induced apoptosis of inner ear sensory cells. 2004 , 25, 627-32 | 86 |
| 1559 | Cytotoxic effects of mansonone E and F isolated from <i>Ulmus pumila</i> . 2004 , 27, 1025-30 | 44 |
| 1558 | Methylene chloride fraction of <i>Spatholobi Caulis</i> induces apoptosis via caspase dependent pathway in U937 cells. 2004 , 27, 1348-52 | 13 |
| 1557 | Inhibition of apoptosis by Zn ²⁺ in renal tubular cells following ATP depletion. 2004 , 287, F492-500 | 20 |
| 1556 | Dracorhodin perchlorate induces apoptosis via activation of caspases and generation of reactive oxygen species. 2004 , 95, 273-83 | 26 |

| | | |
|------|---|-----|
| 1555 | Intracellular signaling pathways involved in Gas6-Axl-mediated survival of endothelial cells. 2004 , 287, H1207-13 | 109 |
| 1554 | Role of Immunohistochemical Expression of Caspase-3 in Gastric Carcinoma. 2005 , 4, 247-250 | |
| 1553 | Regulation of Cell-Cycle and Apoptosis in Human Brain Tumors. 2005 , 249-264 | 1 |
| 1552 | Vitamin K analog (compound 5) induces apoptosis in human hepatocellular carcinoma independent of the caspase pathway. 2005 , 16, 837-44 | 3 |
| 1551 | E2 of hepatitis C virus inhibits apoptosis. 2005 , 175, 8226-35 | 63 |
| 1550 | Nitric oxide induces apoptosis in mouse C2C12 myoblast cells. 2005 , 97, 369-76 | 23 |
| 1549 | Nuclear substructure reorganization during late-stage erythropoiesis is selective and does not involve caspase cleavage of major nuclear substructural proteins. 2005 , 106, 2200-5 | 43 |
| 1548 | Adenosine triphosphate induces activation of caspase-3 in apoptosis of human granulosa-luteal cells. 2005 , 52, 327-35 | 17 |
| 1547 | Beta-D-xylopyranosyl-(1-->3)-beta-D-glucuronopyranosyl echinocystic acid isolated from the roots of <i>Codonopsis lanceolata</i> induces caspase-dependent apoptosis in human acute promyelocytic leukemia HL-60 cells. 2005 , 28, 854-9 | 31 |
| 1546 | Enhancement of apoptosis via an extrinsic factor, TNF-alpha, in cells infected with cytopathic bovine viral diarrhea virus. 2005 , 7, 1482-91 | 28 |
| 1545 | Soman-induced convulsions: the neuropathology revisited. 2005 , 215, 1-24 | 95 |
| 1544 | Control of death receptor and mitochondrial-dependent apoptosis by c-Jun N-terminal kinase in hippocampal CA1 neurones following global transient ischaemia. 2005 , 92, 1054-60 | 51 |
| 1543 | IL-2-mediated apoptosis of kidney tubular epithelial cells is regulated by the caspase-8 inhibitor c-FLIP. 2005 , 67, 1397-409 | 32 |
| 1542 | A role for synGAP in regulating neuronal apoptosis. 2005 , 21, 611-21 | 45 |
| 1541 | Outer membrane protein 38 of <i>Acinetobacter baumannii</i> localizes to the mitochondria and induces apoptosis of epithelial cells. 2005 , 7, 1127-38 | 209 |
| 1540 | Cardiotoxin III induces apoptosis in K562 cells through a mitochondrial-mediated pathway. 2005 , 32, 515-20 | 29 |
| 1539 | A methoxy derivative of resveratrol analogue selectively induced activation of the mitochondrial apoptotic pathway in transformed fibroblasts. 2005 , 92, 513-21 | 82 |
| 1538 | Promoting apoptosis as a strategy for cancer drug discovery. 2005 , 5, 876-85 | 894 |

| | | |
|------|--|------|
| 1537 | Translational control in stress and apoptosis. 2005 , 6, 318-27 | 1010 |
| 1536 | The adaptor protein TRADD activates distinct mechanisms of apoptosis from the nucleus and the cytoplasm. 2005 , 12, 473-81 | 46 |
| 1535 | Nonsense-mediated mRNA decay among human caspases: the caspase-2S putative protein is encoded by an extremely short-lived mRNA. 2005 , 12, 687-9 | 24 |
| 1534 | Cell size reduction induced by inhibition of the mTOR/S6K-signaling pathway protects Jurkat cells from apoptosis. 2005 , 12, 1344-57 | 63 |
| 1533 | Functional promoter haplotypes of the human FAS gene are associated with the phenotype of SLE characterized by thrombocytopenia. 2005 , 6, 699-706 | 21 |
| 1532 | Nitric oxide inhibits caspase activation and apoptotic morphology but does not rescue neuronal death. 2005 , 25, 348-57 | 41 |
| 1531 | Biphasic cytochrome c release after transient global ischemia and its inhibition by hypothermia. 2005 , 25, 1119-29 | 66 |
| 1530 | Caspase-8 sumoylation is associated with nuclear localization. 2005 , 24, 3268-73 | 56 |
| 1529 | Targeted expression of maspin in tumor vasculatures induces endothelial cell apoptosis. 2005 , 24, 2008-19 | 50 |
| 1528 | Resensitization of breast cancer cells to anoikis by tropomyosin-1: role of Rho kinase-dependent cytoskeleton and adhesion. 2005 , 24, 8291-303 | 76 |
| 1527 | Inhibitory effects of rosmarinic acid on adriamycin-induced apoptosis in H9c2 cardiac muscle cells by inhibiting reactive oxygen species and the activations of c-Jun N-terminal kinase and extracellular signal-regulated kinase. 2005 , 70, 1066-78 | 94 |
| 1526 | Failure of FK506 (tacrolimus) to alleviate apomorphine-induced circling in rat Parkinson model in spite of some cytoprotective effects in SH-SY5Y dopaminergic cells. 2005 , 1038, 83-91 | 12 |
| 1525 | Apoptosis in perinatal hypoxic-ischemic brain injury: how important is it and should it be inhibited?. 2005 , 50, 244-57 | 100 |
| 1524 | Apoptotic cell death is initiated during normothermic ischemia in human kidneys. 2005 , 5, 68-75 | 42 |
| 1523 | A structure of the human apoptosome at 12.8 Å resolution provides insights into this cell death platform. 2005 , 13, 1725-35 | 122 |
| 1522 | Inhibition of N-methyl-D-aspartate receptors increases paraoxon-induced apoptosis in cultured neurons. 2005 , 208, 57-67 | 11 |
| 1521 | Molecular mechanisms of light-induced photoreceptor apoptosis and neuroprotection for retinal degeneration. 2005 , 24, 275-306 | 516 |
| 1520 | Involvement of the tumor necrosis factor (TNF)/TNF receptor system in leukemic cell apoptosis induced by histone deacetylase inhibitor depsipeptide (FK228). 2005 , 203, 387-97 | 39 |

| | | |
|------|---|-----|
| 1519 | Role of p53 status in chemosensitivity determination of cancer cells against histone deacetylase inhibitor sodium butyrate. 2005 , 115, 11-8 | 21 |
| 1518 | Thymoquinone induces apoptosis through activation of caspase-8 and mitochondrial events in p53-null myeloblastic leukemia HL-60 cells. 2005 , 117, 409-17 | 203 |
| 1517 | Antimycin A-induced killing of HL-60 cells: apoptosis initiated from within mitochondria does not necessarily proceed via caspase 9. 2005 , 63, 69-76 | 21 |
| 1516 | Apoptosis of tail muscle during amphibian metamorphosis involves a caspase 9-dependent mechanism. 2005 , 233, 76-87 | 21 |
| 1515 | Drosophila melanogaster as a complementary system for studying HIV-1-related genes and proteins. 2005 , 80, 451-5 | 5 |
| 1514 | Differential apoptotic pathways in human keratinocyte HaCaT cells exposed to UVB and UVC. 2005 , 10, 1121-30 | 81 |
| 1513 | Etoposide (VP-16) sensitizes p53-deficient human non-small cell lung cancer cells to caspase-7-mediated apoptosis. 2005 , 10, 643-50 | 26 |
| 1512 | Reactive oxygen species induce signals that lead to apoptotic DNA degradation in primary CD4+ T cells. 2005 , 10, 1433-43 | 6 |
| 1511 | Global detection of molecular changes reveals concurrent alteration of several biological pathways in nonsmall cell lung cancer cells. 2005 , 274, 141-54 | 14 |
| 1510 | Cyclic AMP alleviates endoplasmic stress and programmed cell death induced by lipopolysaccharides in human endothelial cells. 2005 , 320, 91-8 | 25 |
| 1509 | Therapeutic implications of interferon regulatory factor (IRF)-1 and IRF-2 in diffusely infiltrating astrocytomas (DIA): response to interferon (IFN)-beta in glioblastoma cells and prognostic value for DIA. 2005 , 74, 249-60 | 17 |
| 1508 | E7-expressing HaCaT keratinocyte cells are resistant to oxidative stress-induced cell death via the induction of catalase. 2005 , 5, 2112-22 | 24 |
| 1507 | Immunohistochemical Detection of Apoptosis-Related Proteins in Gerbil Hippocampus Transient Cerebral Ischemia: Neuroprotective Effect of Pitavastatin. 2005 , 1, 212-225 | |
| 1506 | Boswellic acid acetate induces apoptosis through caspase-mediated pathways in myeloid leukemia cells. 2005 , 4, 381-8 | 65 |
| 1505 | Targeting Inducible Chemotherapy Resistance Mechanisms in Colon Cancer. 2005 , 209-228 | 1 |
| 1504 | Mesangial cell apoptosis induced by stimulation of the adenosine A3 receptor: signaling and apoptotic events. 2005 , 53, 37-43 | 11 |
| 1503 | Structure-activity relationships OF N-methylthiolated beta-lactam antibiotics with C3 substitutions and their selective induction of apoptosis in human cancer cells. 2005 , 10, 1183-90 | 12 |
| 1502 | Acidic pH inhibits ATP depletion-induced tubular cell apoptosis by blocking caspase-9 activation in apoptosome. 2005 , 289, F410-9 | 23 |

| | | |
|------|--|-----|
| 1501 | The excitatory amino acid transporter-2 induces apoptosis and decreases glioma growth in vitro and in vivo. 2005 , 65, 1934-40 | 72 |
| 1500 | B cell abnormality and autoimmune disorders. 2005 , 38, 331-7 | 20 |
| 1499 | p53-defective tumors with a functional apoptosome-mediated pathway: a new therapeutic target. 2005 , 97, 765-77 | 86 |
| 1498 | Mild sustained and intermittent hypoxia induce apoptosis in PC-12 cells via different mechanisms. 2005 , 288, C535-42 | 56 |
| 1497 | Alterations in growth and apoptosis of insulin receptor substrate-1-deficient beta-cells. 2005 , 289, E337-46 | 34 |
| 1496 | Antineoplastic cyclic astin analogues kill tumour cells via caspase-mediated induction of apoptosis. 2005 , 26, 733-9 | 25 |
| 1495 | Death by association: BH3 domain-only proteins and liver injury. 2005 , 289, G987-90 | 14 |
| 1494 | Engineering a dimeric caspase-9: a re-evaluation of the induced proximity model for caspase activation. 2005 , 3, e183 | 89 |
| 1493 | Impact loading of articular cartilage during transplantation of osteochondral autograft. 2005 , 87, 1285-91 | 53 |
| 1492 | Distinct roles of basal steady-state and induced H-ferritin in tumor necrosis factor-induced death in L929 cells. 2005 , 25, 6673-81 | 43 |
| 1491 | The membrane-associated inhibitor of apoptosis protein, BRUCE/Apollon, antagonizes both the precursor and mature forms of Smac and caspase-9. 2005 , 280, 174-82 | 68 |
| 1490 | Schwann cell-specific ablation of laminin gamma1 causes apoptosis and prevents proliferation. 2005 , 25, 4463-72 | 123 |
| 1489 | Brain Tumors. 2005 , | 9 |
| 1488 | Maspin mediates increased tumor cell apoptosis upon induction of the mitochondrial permeability transition. 2005 , 25, 1737-48 | 70 |
| 1487 | Nonoxynol-9 induces apoptosis of endometrial explants by both caspase-dependent and -independent apoptotic pathways. 2005 , 73, 382-8 | 16 |
| 1486 | Role of thioredoxin in the response of normal and transformed cells to histone deacetylase inhibitors. 2005 , 102, 673-8 | 430 |
| 1485 | A novel ligand-independent apoptotic pathway induced by scavenger receptor class B, type I and suppressed by endothelial nitric-oxide synthase and high density lipoprotein. 2005 , 280, 19087-96 | 51 |
| 1484 | Proteinase-activated receptor-1 mediates elastase-induced apoptosis of human lung epithelial cells. 2005 , 33, 231-47 | 106 |

| | | |
|------|--|-----|
| 1483 | Application of Apoptosis to Cancer Treatment. 2005, | |
| 1482 | Apoptosis resistance in Barrett's esophagus: ex vivo bioassay of live stressed tissues. 2005, 100, 424-31 | 39 |
| 1481 | Nucleoplasmin regulates chromatin condensation during apoptosis. 2005, 102, 2778-83 | 39 |
| 1480 | Regulation of caspase 9 through phosphorylation by protein kinase C zeta in response to hyperosmotic stress. 2005, 25, 10543-55 | 61 |
| 1479 | Axonal dynactin p150Glued transports caspase-8 to drive retrograde olfactory receptor neuron apoptosis. 2005, 25, 6092-104 | 46 |
| 1478 | Muscle-specific loss of apoptosis-inducing factor leads to mitochondrial dysfunction, skeletal muscle atrophy, and dilated cardiomyopathy. 2005, 25, 10261-72 | 174 |
| 1477 | Plasma membrane calcium ATPase deficiency causes neuronal pathology in the spinal cord: a potential mechanism for neurodegeneration in multiple sclerosis and spinal cord injury. 2005, 19, 298-300 | 81 |
| 1476 | Adrenodoxin (Adx) and CYP11A1 (P450 _{scc}) induce apoptosis by the generation of reactive oxygen species in mitochondria. 2005, 386, 453-61 | 19 |
| 1475 | Characterization of a previously unidentified viral protein in porcine circovirus type 2-infected cells and its role in virus-induced apoptosis. 2005, 79, 8262-74 | 240 |
| 1474 | Phosphorylated and hypoacetylated mutant p53 enhances cisplatin-induced apoptosis through caspase-9 pathway in the absence of transcriptional activation or translation. 2005, 15, 725 | 1 |
| 1473 | 5E, 8Z, 11Z, 14Z-eicosatetraenoic acid, a novel trans isomer of arachidonic acid, causes G1 phase arrest and induces apoptosis of HL-60 cells. 2005, 27, 1177 | |
| 1472 | Insulin-like growth factors in the treatment of neurological disease. 2005, 9, 135-159 | 35 |
| 1471 | Menstrual-like breakdown and apoptosis in human endometrial explants. 2005, 20, 1709-19 | 27 |
| 1470 | Trichostatin A (TSA) sensitizes the human prostatic cancer cell line DU145 to death receptor ligands treatment. 2005, 4, 382-90 | 19 |
| 1469 | Caspase activation in human spermatozoa in response to physiological and pathological stimuli. 2005, 83 Suppl 1, 1106-12 | 69 |
| 1468 | Alterations in gene expression induced by the lipid peroxidation product, 4-hydroxy-2-nonenal. 2005, 18, 1642-53 | 113 |
| 1467 | Mycelia from <i>Antrodia camphorata</i> in Submerged culture induce apoptosis of human hepatoma HepG2 cells possibly through regulation of Fas pathway. 2005, 53, 5559-64 | 46 |
| 1466 | Involvement of c-Jun N-terminal kinase in G2/M arrest and caspase-mediated apoptosis induced by sulforaphane in DU145 prostate cancer cells. 2005, 52, 213-24 | 103 |

| | | |
|------|--|-----|
| 1465 | Growth inhibitory and antimetastatic effect of green tea polyphenols on metastasis-specific mouse mammary carcinoma 4T1 cells in vitro and in vivo systems. 2005 , 11, 1918-27 | 129 |
| 1464 | Induction of endoplasmic reticulum stress and apoptosis by a marine prostanoid in human hepatocellular carcinoma. 2005 , 43, 679-86 | 41 |
| 1463 | Wild-type alpha-synuclein interacts with pro-apoptotic proteins PKCdelta and BAD to protect dopaminergic neuronal cells against MPP+-induced apoptotic cell death. 2005 , 139, 137-52 | 56 |
| 1462 | Inhibition of P53-related apoptosis had no effect on PrP(Sc) accumulation and prion disease incubation time. 2005 , 18, 282-5 | 11 |
| 1461 | Translocation of Bax in rat hepatocytes cultured with ferric nitrilotriacetate. 2005 , 76, 2763-72 | 7 |
| 1460 | Increase of Bax/ Bcl-XL ratio and arrest of cell cycle by luteolin in immortalized human hepatoma cell line. 2005 , 76, 1883-93 | 76 |
| 1459 | Amiloride potentiates TRAIL-induced tumor cell apoptosis by intracellular acidification-dependent Akt inactivation. 2005 , 326, 752-8 | 22 |
| 1458 | MEKK1-induced apoptosis is mediated by Smac/Diablo release from the mitochondria. 2005 , 331, 1089-98 | 9 |
| 1457 | Involvement of Bcl-2 family, cytochrome c and caspase 3 in induction of apoptosis by beauvericin in human non-small cell lung cancer cells. 2005 , 230, 248-59 | 107 |
| 1456 | Tapered progesterone withdrawal enhances behavioral and molecular recovery after traumatic brain injury. 2005 , 195, 423-9 | 59 |
| 1455 | Amyloid-beta causes apoptosis of neuronal cells via caspase cascade, which can be prevented by amyloid-beta-derived short peptides. 2005 , 196, 282-9 | 76 |
| 1454 | Cell death induced by Pteris semipinnata L. is associated with p53 and oxidant stress in gastric cancer cells. 2005 , 579, 1477-87 | 22 |
| 1453 | Loss of Apaf-1 leads to partial rescue of the HAND2-null phenotype. 2005 , 278, 155-62 | 15 |
| 1452 | Severe cell fragmentation in the endothelial cell apoptosis induced by snake apoptosis toxin VAP1 is an apoptotic characteristic controlled by caspases. 2005 , 46, 1-6 | 12 |
| 1451 | Inhibition of caspases alleviates gentamicin-induced cochlear damage in guinea pigs. 2005 , 32, 33-7 | 25 |
| 1450 | Inhibition of TNFalpha in vivo prevents hyperoxia-mediated activation of caspase 3 in type II cells. 2005 , 6, 10 | 27 |
| 1449 | Molecular mechanism of apoptosis induced by mechanical forces. 2005 , 245, 45-90 | 65 |
| 1448 | Attenuation of CD95-induced apoptosis by inorganic mercury: caspase-3 is not a direct target of low levels of Hg2+. 2005 , 155, 161-70 | 23 |

| | | |
|------|--|-----|
| 1447 | Death Receptors in Cancer Therapy. 2005 , | 3 |
| 1446 | NADPH-oxidase-driven oxygen radical production determines chondrocyte death and partly regulates metalloproteinase-mediated cartilage matrix degradation during interferon-gamma-stimulated immune complex arthritis. 2005 , 7, R885-95 | 27 |
| 1445 | Reviews and Protocols in DT40 Research. 2006 , | 13 |
| 1444 | Cancer Drug Resistance. 2006 , | 17 |
| 1443 | Caspase-dependent and caspase-independent apoptosis induced by evodiamine in human leukemic U937 cells. 2006 , 5, 2398-407 | 86 |
| 1442 | Caspase 9 promoter polymorphisms and risk of primary lung cancer. 2006 , 15, 1963-71 | 80 |
| 1441 | Mast cell chymase induces smooth muscle cell apoptosis by disrupting NF-kappaB-mediated survival signaling. 2006 , 312, 1289-98 | 42 |
| 1440 | Bistability in apoptosis: roles of bax, bcl-2, and mitochondrial permeability transition pores. 2006 , 90, 1546-59 | 239 |
| 1439 | Pathophysiology of acute ischaemic stroke: an analysis of common signalling mechanisms and identification of new molecular targets. 2006 , 73, 159-75 | 59 |
| 1438 | Expression of transforming K-Ras oncogene affects mitochondrial function and morphology in mouse fibroblasts. 2006 , 1757, 1338-56 | 57 |
| 1437 | "How do cardiomyocytes die?" apoptosis and autophagic cell death in cardiac myocytes. 2006 , 12, 381-91 | 62 |
| 1436 | Polymorphisms in the FAS and FASL genes and risk of lung cancer in a Korean population. 2006 , 54, 303-8 | 35 |
| 1435 | Naringenin-induced apoptosis via activation of NF-kappaB and necrosis involving the loss of ATP in human promyeloleukemia HL-60 cells. 2006 , 166, 131-9 | 63 |
| 1434 | Genetic variants in caspase genes and susceptibility to non-Hodgkin lymphoma. 2007 , 28, 823-7 | 52 |
| 1433 | Rapid communication: renal apoptosis after shockwave application in rabbit model. 2006 , 20, 1091-5 | 13 |
| 1432 | Tapered progesterone withdrawal promotes long-term recovery following brain trauma. 2006 , 200, 378-85 | 33 |
| 1431 | Differential regulation of the intrinsic pathway of apoptosis in brain and liver during ageing. 2006 , 580, 3739-45 | 18 |
| 1430 | External Qi of Yan Xin Qigong differentially regulates the Akt and extracellular signal-regulated kinase pathways and is cytotoxic to cancer cells but not to normal cells. 2006 , 38, 2102-13 | 31 |

| | | |
|------|--|------|
| 1429 | Alisol B acetate, a triterpene from <i>Alismatis rhizoma</i> , induces Bax nuclear translocation and apoptosis in human hormone-resistant prostate cancer PC-3 cells. 2006 , 231, 270-8 | 82 |
| 1428 | Petrotetrayndiol A induces cell cycle arrest and apoptosis in SK-MEL-2 human melanoma cells through cytochrome c-mediated activation of caspases. 2006 , 232, 214-25 | 26 |
| 1427 | Mitomycin C induces apoptosis via Fas/FasL dependent pathway and suppression of IL-18 in cervical carcinoma cells. 2006 , 237, 33-44 | 27 |
| 1426 | Triptolide induces Bcl-2 cleavage and mitochondria dependent apoptosis in p53-deficient HL-60 cells. 2006 , 241, 31-41 | 49 |
| 1425 | Amarogentin can reduce hyperproliferation by downregulation of Cox-II and upregulation of apoptosis in mouse skin carcinogenesis model. 2006 , 244, 252-9 | 31 |
| 1424 | DNA damage-induced cell death by apoptosis. 2006 , 12, 440-50 | 1069 |
| 1423 | Apoptosis inhibition in ischemic brain by intraperitoneal PTD-BIR3-RING (XIAP). 2006 , 48, 50-9 | 24 |
| 1422 | Serine protease inhibitor 6 protects cytotoxic T cells from self-inflicted injury by ensuring the integrity of cytotoxic granules. 2006 , 24, 451-61 | 98 |
| 1421 | Stressing out over survival: glutamine as an apoptotic modulator. 2006 , 131, 26-40 | 85 |
| 1420 | meso-Dihydroguaiaretic acid attenuates the neurotoxic effect of staurosporine in primary rat cortical cultures. 2006 , 50, 733-40 | 13 |
| 1419 | p-Phenylenediamine induces p53-mediated apoptosis in Mardin-Darby canine kidney cells. 2006 , 20, 801-7 | 28 |
| 1418 | Cadmium-induced apoptosis in rat hepatocytes does not necessarily involve caspase-dependent pathways. 2006 , 20, 1331-42 | 34 |
| 1417 | Induction of apoptosis by YTX in myoblast cell lines via mitochondrial signalling transduction pathway. 2006 , 20, 1419-26 | 40 |
| 1416 | Inhibitor of Apoptosis Proteins. 405-426 | |
| 1415 | Role of mechanical stress in the form of cardiomyocyte death during the early phase of reperfusion. 2006 , 70, 1344-55 | 21 |
| 1414 | Induction of apoptosis by Radix Paeoniae Alba extract through cytochrome c release and the activations of caspase-9 and caspase-3 in HL-60 cells. 2006 , 29, 1082-6 | 28 |
| 1413 | Antitumor effects of IDN5109 on head and neck squamous cell carcinoma. 2006 , 15, 329 | |
| 1412 | Syntheses, molecular targets and antitumor activities of novel triptycene bisquinones and 1,4-anthracenedione analogs. 2006 , 6, 303-18 | 9 |

| | | |
|------|--|-----|
| 1411 | Relative biological effectiveness of 280 keV neutrons for apoptosis in human lymphocytes. 2006 , 91, 68-75 | 8 |
| 1410 | The tumor suppressor p53 is not required for antigen receptor-mediated apoptosis of B lymphocytes. 2006 , 6, 54-61 | |
| 1409 | Proteomic characterization of the cytotoxic mechanism of gold (III) porphyrin 1a, a potential anticancer drug. 2006 , 6, 131-42 | 78 |
| 1408 | Modulation of isolated N-methyl-d-aspartate receptor response under hyperbaric conditions. 2006 , 24, 3453-62 | 15 |
| 1407 | Toxoplasma gondii inhibits ultraviolet light-induced apoptosis through multiple interactions with the mitochondrion-dependent programmed cell death pathway. 2006 , 8, 301-15 | 65 |
| 1406 | Postnatal developmental programmed cell death in dopamine neurons. 2003 , 991, 69-79 | 45 |
| 1405 | Phosphorylation of rat brain mitochondrial voltage-dependent anion as a potential tool to control leakage of cytochrome c. 2006 , 98, 670-6 | 34 |
| 1404 | Docosahexaenoic acid prevents apoptosis of retina photoreceptors by activating the ERK/MAPK pathway. 2006 , 98, 1507-20 | 83 |
| 1403 | Thrombin-triggered platelet apoptosis. 2006 , 4, 2656-63 | 150 |
| 1402 | Effects of Coeloglossum. viride var. bracteatum extract on memory deficits and pathological changes in senescent mice. 2006 , 98, 55-60 | 17 |
| 1401 | Mitochondrial control of cell death induced by HIV-1-encoded proteins. 2000 , 926, 149-64 | 61 |
| 1400 | A caspase-independent cell clearance program. The LEI/L-DNase II pathway. 2000 , 926, 192-203 | 24 |
| 1399 | Cytotoxic and apoptotic effects of prenylflavonoid artonin B in human acute lymphoblastic leukemia cells. 2006 , 27, 1165-74 | 7 |
| 1398 | Intravenous immunoglobulin inhibits anti-glycoprotein IIb-induced platelet apoptosis in a murine model of immune thrombocytopenia. 2006 , 133, 78-82 | 55 |
| 1397 | Somatic hypermutation of Ig genes is affected differently by failures in apoptosis caused by disruption of Fas (lpr mutation) or by overexpression of Bcl-2. 2006 , 63, 420-9 | 3 |
| 1396 | Esculetin induces apoptosis and inhibits adipogenesis in 3T3-L1 cells. 2006 , 14, 1691-9 | 68 |
| 1395 | p63 protects the female germ line during meiotic arrest. 2006 , 444, 624-8 | 389 |
| 1394 | Dexamethasone protects primary cultured hepatocytes from death receptor-mediated apoptosis by upregulation of cFLIP. 2006 , 13, 512-23 | 48 |

| | | |
|------|--|----|
| 1393 | Association of a microsatellite in FASL to type II diabetes and of the FAS-670G>A genotype to insulin resistance. 2006 , 7, 316-21 | 22 |
| 1392 | The expression of antiapoptotic protein survivin is transcriptionally upregulated by DEC1 primarily through multiple sp1 binding sites in the proximal promoter. 2006 , 25, 3296-306 | 96 |
| 1391 | In vivo and in vitro sensitization of leukemic cells to adriamycin-induced apoptosis by pentoxifylline. Involvement of caspase cascades and I κ B phosphorylation. 2006 , 103, 149-58 | 21 |
| 1390 | Anion-exchange blocker enhances cytoplasmic vacuole formation and cell death in serum-deprived mouse kidney epithelial cells in mice. 2006 , 30, 93-100 | 16 |
| 1389 | Hydrogen peroxide-induced apoptosis in human gastric carcinoma MGC803 cells. 2006 , 30, 332-7 | 32 |
| 1388 | Expression of apoptotic nuclei by ultrastructural terminal deoxyribonucleotidyl transferase mediated dUTP nick end labeling and detection of FasL, caspases and PARP protein molecules in cadmium induced acute alveolar cell injury. 2006 , 218, 197-204 | 12 |
| 1387 | Does transduced p27 induce apoptosis in human tumor cell lines?. 2006 , 1090, 120-9 | 0 |
| 1386 | Inflammatory response in human tick-borne encephalitis: analysis of postmortem brain tissue. 2006 , 12, 322-7 | 82 |
| 1385 | Do lysosomes induce cell death?. 2006 , 58, 493-4 | 4 |
| 1384 | Nitric oxide, caveolae, and vascular pathology. 2006 , 6, 1-13 | 22 |
| 1383 | Manipulating glutathione-S-transferases may prevent the development of tolerance to nitroglycerin. 2006 , 6, 131-44 | 9 |
| 1382 | New tricks for old drugs: the anticarcinogenic potential of DNA repair inhibitors. 2006 , 37, 203-18 | 56 |
| 1381 | A novel indoloquinoline derivative, IQDMA, induces S-phase arrest and apoptosis in promyelocytic leukemia HL-60 cells. 2006 , 22, 417-27 | 14 |
| 1380 | Down regulation of N-acetylglucosaminyltransferase V facilitates all-transretinoic acid to induce apoptosis of human hepatocarcinoma cells. 2006 , 284, 103-10 | 9 |
| 1379 | Characterization of cell clones stably transfected with short form caspase-9: apoptotic resistance and Bcl-XL expression. 2006 , 282, 1-12 | 5 |
| 1378 | Nuclear caspase-3 and caspase-7 activation, and poly(ADP-ribose) polymerase cleavage are early events in camptothecin-induced apoptosis. 2006 , 11, 131-9 | 35 |
| 1377 | Induction of endonuclease G-mediated apoptosis in human oral squamous cell carcinoma cells by protein kinase C inhibitor safingol. 2006 , 11, 47-56 | 29 |
| 1376 | Signaling through the TRAIL receptor DR5/FADD pathway plays a role in the apoptosis associated with skeletal myoblast differentiation. 2006 , 11, 2103-13 | 22 |

| | | |
|------|---|----|
| 1375 | Suppressive effect of elongation factor 2 on apoptosis induced by HIV-1 viral protein R. 2006 , 11, 377-88 | 30 |
| 1374 | A novel paraptosis pathway involving LEI/L-DNaseII for EGF-induced cell death in somato-lactotrope pituitary cells. 2006 , 11, 367-75 | 37 |
| 1373 | Cell death regulation by B-cell lymphoma protein. 2006 , 11, 459-71 | 24 |
| 1372 | Caspase 3, periodically expressed and activated at G2/M transition, is required for nocodazole-induced mitotic checkpoint. 2006 , 11, 765-71 | 28 |
| 1371 | The extrinsic and intrinsic apoptotic pathways are differentially affected by temperature upstream of mitochondrial damage. 2006 , 11, 1339-47 | 15 |
| 1370 | cDNA cloning and functional characterization of <i>Xenopus laevis</i> DNase gamma. 2006 , 11, 555-62 | 4 |
| 1369 | Apoptosis of human hepatoma cells induced by <i>Gynostemma pentaphyllum</i> Makino. 2006 , 5, 173-177 | 7 |
| 1368 | Selective cytochrome c displacement by phosphate and Ca(2+) in brain mitochondria. 2006 , 212, 199-210 | 5 |
| 1367 | Endoplasmic and vascular surface activation during organ preservation: refining upon the benefits of machine perfusion. 2006 , 6, 1355-66 | 51 |
| 1366 | Polymorphisms in the caspase-8 gene and the risk of lung cancer. 2006 , 169, 121-7 | 55 |
| 1365 | Cellular mechanism of U18666A-mediated apoptosis in cultured murine cortical neurons: bridging Niemann-Pick disease type C and Alzheimer's disease. 2006 , 18, 1844-53 | 55 |
| 1364 | Genomic and non-genomic effects of different glucocorticoids on mouse thymocyte apoptosis. 2006 , 529, 63-70 | 26 |
| 1363 | Induction of Fas clustering and apoptosis by coral prostanoid in human hormone-resistant prostate cancer cells. 2006 , 542, 22-30 | 24 |
| 1362 | Phenylbenzopyrones structure-activity studies identify betuletol derivatives as potential antitumoral agents. 2006 , 548, 9-20 | 35 |
| 1361 | Thioredoxin in cancer--role of histone deacetylase inhibitors. 2006 , 16, 436-43 | 55 |
| 1360 | Mechanism of apoptosis induced by a polysaccharide, from the loach <i>Misgurnus anguillicaudatus</i> (MAP) in human hepatocellular carcinoma cells. 2006 , 210, 236-45 | 42 |
| 1359 | Spectral kinetics ratiometry: a simple approach for real-time monitoring of fluorophore distributions in living cells. 2006 , 69, 912-9 | 7 |
| 1358 | Mitochondrial mechanism of microvascular endothelial cells apoptosis in hyperhomocysteinemia. 2006 , 98, 1150-62 | 71 |

| | | |
|------|---|-----|
| 1357 | Pharmacologic inhibitors of extracellular signal-regulated kinase (ERKs) and c-Jun NH(2)-terminal kinase (JNK) decrease glutathione content and sensitize human promonocytic leukemia cells to arsenic trioxide-induced apoptosis. 2006 , 209, 1006-15 | 38 |
| 1356 | Modulation of apoptosis in the mouse brain after morphine treatments and morphine withdrawal. 2006 , 83, 1352-61 | 53 |
| 1355 | Glutathione peroxidase 4 protects cortical neurons from oxidative injury and amyloid toxicity. 2006 , 84, 202-8 | 65 |
| 1354 | NF-kB inhibition as a strategy to enhance etoposide-induced apoptosis in K562 cell line. 2006 , 81, 938-45 | 38 |
| 1353 | New symmetrical quinazoline derivatives selectively induce apoptosis in human cancer cells. 2006 , 5, 850-9 | 21 |
| 1352 | 2:1 Stoichiometry of the CED-4-CED-9 complex and the tetrameric CED-4: insights into the regulation of CED-3 activation. 2006 , 5, 31-4 | 18 |
| 1351 | TSA-induced cell death in prostate cancer cell lines is caspase-2 dependent and involves the PIDDosome. 2006 , 5, 1199-205 | 16 |
| 1350 | Role and regulation of nodal/activin receptor-like kinase 7 signaling pathway in the control of ovarian follicular atresia. 2006 , 20, 2469-82 | 40 |
| 1349 | Doxazosin induces apoptosis of benign and malignant prostate cells via a death receptor-mediated pathway. 2006 , 66, 464-72 | 79 |
| 1348 | Cytotoxicity of water-soluble fullerene in vascular endothelial cells. 2006 , 290, C1495-502 | 185 |
| 1347 | Regulation of Apoptosis by Gram-Positive Bacteria: Mechanistic Diversity and Consequences for Immunity. 2006 , 2, 119-141 | 37 |
| 1346 | Mechanism of Action and Therapeutic Potential of Novel Adamantyl Retinoid-Related Molecules. 2006 , 2, 185-198 | 9 |
| 1345 | Mechanism of induction of pancreatic acinar cell apoptosis by hydrogen sulfide. 2006 , 291, C503-10 | 49 |
| 1344 | Ageing evokes an intrinsic pro-apoptotic signalling pathway in rat cochlea. 2006 , 126, 1134-9 | 25 |
| 1343 | The voltage-dependent anion channel (VDAC): function in intracellular signalling, cell life and cell death. 2006 , 12, 2249-70 | 257 |
| 1342 | Mutant huntingtin alters MAPK signaling pathways in PC12 and striatal cells: ERK1/2 protects against mutant huntingtin-associated toxicity. 2006 , 15, 273-85 | 111 |
| 1341 | Nucleocytoplasmic trafficking of the Syk protein tyrosine kinase. 2006 , 26, 3478-91 | 54 |
| 1340 | A primate-specific acceleration in the evolution of the caspase-dependent apoptosis pathway. 2006 , 15, 3034-40 | 18 |

| | | |
|------|--|-----|
| 1339 | Radiation-induced caspase-8 mediates p53-independent apoptosis in glioma cells. 2006 , 66, 4223-32 | 44 |
| 1338 | In stent restenosis: bane of the stent era. 2006 , 59, 232-9 | 190 |
| 1337 | Pro- and antiapoptotic proteins regulate apoptosis but do not protect against cytokine-mediated cytotoxicity in rat islets and beta-cell lines. 2006 , 55, 1398-406 | 60 |
| 1336 | Group B Streptococcus induces macrophage apoptosis by calpain activation. 2006 , 176, 7542-56 | 56 |
| 1335 | Down-regulation of beta1,4-galactosyltransferase V is a critical part of etoposide-induced apoptotic process and could be mediated by decreasing Sp1 levels in human glioma cells. 2006 , 16, 1045-51 | 18 |
| 1334 | Apoptosis induction by activator protein 2alpha involves transcriptional repression of Bcl-2. 2006 , 281, 16207-19 | 48 |
| 1333 | Structure and activation mechanism of the Drosophila initiator caspase Dronc. 2006 , 281, 8667-74 | 39 |
| 1332 | Identification of PP1alpha as a caspase-9 regulator in IL-2 deprivation-induced apoptosis. 2006 , 177, 2441-51 | 25 |
| 1331 | Calcium-independent phospholipase A2 localizes in and protects mitochondria during apoptotic induction by staurosporine. 2006 , 281, 22275-22288 | 105 |
| 1330 | Protective effects of catalase overexpression on UVB-induced apoptosis in normal human keratinocytes. 2006 , 281, 17999-8007 | 85 |
| 1329 | Cell biology of mitochondrial dynamics. 2006 , 254, 151-213 | 35 |
| 1328 | Small-molecule-mediated rescue of protein function by an inducible proteolytic shunt. 2007 , 104, 11209-14 | 72 |
| 1327 | A dimeric Smac/diablo peptide directly relieves caspase-3 inhibition by XIAP. Dynamic and cooperative regulation of XIAP by Smac/Diablo. 2007 , 282, 30718-27 | 78 |
| 1326 | A ubiquitin ligase complex regulates caspase activation during sperm differentiation in Drosophila. 2007 , 5, e251 | 86 |
| 1325 | Anti-apoptotic actions of insulin-like growth factors: lessons from development and implications in neoplastic cell transformation. 2007 , 13, 687-703 | 24 |
| 1324 | Caspase-8 preferentially senses the apoptosis-inducing action of NG-18, a Gambogic acid derivative, in human leukemia HL-60 cells. 2007 , 6, 691-6 | 39 |
| 1323 | Anti-Proliferative effect of ursolic acid on multidrug resistant hepatoma cells R-HepG2 by apoptosis induction. 2007 , 6, 1377-1385 | 10 |
| 1322 | Reduction in glutathione peroxidase 4 increases life span through increased sensitivity to apoptosis. 2007 , 62, 932-42 | 130 |

| | | |
|------|--|-----|
| 1321 | Melatonin is able to reduce the apoptotic liver changes induced by aging via inhibition of the intrinsic pathway of apoptosis. 2007 , 62, 687-95 | 51 |
| 1320 | Apoptotic gene expression in Alzheimer's disease hippocampal tissue. 2007 , 22, 319-28 | 39 |
| 1319 | ATP-depleting carbohydrates prevent tumor necrosis factor receptor 1-dependent apoptotic and necrotic liver injury in mice. 2007 , 321, 875-83 | 7 |
| 1318 | The inhibitor of apoptosis proteins as therapeutic targets in cancer. 2007 , 13, 5995-6000 | 169 |
| 1317 | Mechanisms used by human papillomaviruses to escape the host immune response. 2007 , 7, 79-89 | 162 |
| 1316 | Structural basis for inhibition of translation by the tumor suppressor Pcd4. 2007 , 27, 147-56 | 64 |
| 1315 | Enhancement of docetaxel-induced cytotoxicity by blocking epidermal growth factor receptor and cyclooxygenase-2 pathways in squamous cell carcinoma of the head and neck. 2007 , 13, 3015-23 | 24 |
| 1314 | Interleukin-4 inhibits caspase-3 by regulating several proteins in the Fas pathway during initial stages of human T helper 2 cell differentiation. 2007 , 6, 238-51 | 21 |
| 1313 | Saucernetin-7 isolated from <i>Saururus chinensis</i> induces caspase-dependent apoptosis in human promyelocytic leukemia HL-60 cells. 2007 , 30, 1516-22 | 11 |
| 1312 | Down-regulation of uPAR and uPA activates caspase-mediated apoptosis and inhibits the PI3K/AKT pathway. 2007 , 31, 19 | 6 |
| 1311 | Apoptotic pathway induced by noscapine in human myelogenous leukemic cells. 2007 , 18, 1139-47 | 23 |
| 1310 | Lidocaine induces apoptosis via the mitochondrial pathway independently of death receptor signaling. 2007 , 107, 136-43 | 94 |
| 1309 | Protection against cisplatin-induced ototoxicity by adeno-associated virus-mediated delivery of the X-linked inhibitor of apoptosis protein is not dependent on caspase inhibition. 2007 , 28, 417-25 | 25 |
| 1308 | Circulating levels of cytochrome c after resuscitation from cardiac arrest: a marker of mitochondrial injury and predictor of survival. 2007 , 292, H767-75 | 70 |
| 1307 | Cadmium induces apoptosis in human embryonic kidney (HEK) 293 cells by caspase-dependent and -independent pathways acting on mitochondria. 2007 , 21, 343-54 | 90 |
| 1306 | Induction of G2/M phase arrest and apoptosis by a novel enediyne derivative, THDB, in chronic myeloid leukemia (HL-60) cells. 2007 , 21, 90-8 | 36 |
| 1305 | Cytoprotective effects of selenium on cadmium-induced LLC-PK1 cells apoptosis by activating JNK pathway. 2007 , 21, 677-84 | 55 |
| 1304 | XIAP: cell death regulation meets copper homeostasis. 2007 , 463, 168-74 | 73 |

| | | |
|------|---|------|
| 1303 | Trichosanthin induced apoptosis in HL-60 cells via mitochondrial and endoplasmic reticulum stress signaling pathways. 2007 , 1770, 1169-80 | 54 |
| 1302 | Saxifragifolin B from <i>Androsace umbellata</i> induced apoptosis on human hepatoma cells. 2007 , 362, 759-65 | 23 |
| 1301 | IAP antagonists induce autoubiquitination of c-IAPs, NF-kappaB activation, and TNFalpha-dependent apoptosis. 2007 , 131, 669-81 | 1006 |
| 1300 | Cloning and characterization of <i>Xenopus laevis</i> Smac/DIABLO. 2007 , 392, 187-95 | 4 |
| 1299 | 23,24-Dihydrocucurbitacin B induces G2/M cell-cycle arrest and mitochondria-dependent apoptosis in human breast cancer cells (Bcap37). 2007 , 256, 267-78 | 67 |
| 1298 | Progesterone improves acute recovery after traumatic brain injury in the aged rat. 2007 , 24, 1475-86 | 135 |
| 1297 | Plantainoside D protects adriamycin-induced apoptosis in H9c2 cardiac muscle cells via the inhibition of ROS generation and NF-kappaB activation. 2007 , 80, 314-23 | 51 |
| 1296 | Phosphorylation of caspase-9 by CDK1/cyclin B1 protects mitotic cells against apoptosis. 2007 , 26, 301-10 | 188 |
| 1295 | Mechanism of caspase-3 activation during hypoxia in the cerebral cortex of newborn piglets. 2007 , 421, 67-71 | 10 |
| 1294 | Coupled positive feedbacks provoke slow induction plus fast switching in apoptosis. 2007 , 581, 2684-90 | 17 |
| 1293 | Mitochondrial membrane permeabilization in cell death. 2007 , 87, 99-163 | 2750 |
| 1292 | Apoptosis, Senescence, and Cancer. 2007 , | 6 |
| 1291 | Methanolic extracts of <i>Plocamium telfairiae</i> induce cytotoxicity and caspase-dependent apoptosis in HT-29 human colon carcinoma cells. 2007 , 10, 587-93 | 23 |
| 1290 | The Intrinsic Pathway of Apoptosis. 2007 , 3-30 | 3 |
| 1289 | pH-Induced changes in adsorbed cytochrome c. voltammetric and surface-enhanced resonance Raman characterization performed simultaneously at chemically modified silver electrodes. 2007 , 23, 9898-904 | 29 |
| 1288 | Critical roles of reactive oxygen species in mitochondrial permeability transition in mediating evodiamine-induced human melanoma A375-S2 cell apoptosis. 2007 , 41, 1099-108 | 47 |
| 1287 | Breast cancer prevention by green tea catechins and black tea theaflavins in the C3(1) SV40 T,t antigen transgenic mouse model is accompanied by increased apoptosis and a decrease in oxidative DNA adducts. 2007 , 55, 3378-85 | 52 |
| 1286 | Identification of proteins that regulate radiation-induced apoptosis in murine tumors with wild type p53. 2007 , 48, 435-41 | 1 |

| | | |
|------|---|-----|
| 1285 | Synthesis and biological evaluation of 2,4,6-functionalized derivatives of pyrido[2,3-d]pyrimidines as cytotoxic agents and apoptosis inducers. 2008 , 341, 28-41 | 10 |
| 1284 | Cyclin-dependent kinase inhibitor, flavopiridol, induces apoptosis and inhibits tumor growth in drug-resistant osteosarcoma and Ewing's family tumor cells. 2007 , 121, 1212-8 | 29 |
| 1283 | Anti-proliferative effects of evodiamine on human prostate cancer cell lines DU145 and PC3. 2007 , 101, 44-56 | 70 |
| 1282 | Tocotrienols and cancer: Beyond antioxidant activity. 2007 , 109, 445-452 | 57 |
| 1281 | Acute ammonia neurotoxicity in vivo involves increase in cytoplasmic protein P53 without alterations in other markers of apoptosis. 2007 , 85, 2491-9 | 22 |
| 1280 | Biological profile of new apoptotic agents based on 2,4-pyrido[2,3-d]pyrimidine derivatives. 2007 , 15, 1659-69 | 132 |
| 1279 | Caspase-8 dependent osteosarcoma cell apoptosis induced by proteasome inhibitor MG132. 2007 , 31, 1136-43 | 21 |
| 1278 | Aqueous extract of the Chinese medicine, Danggui-Shaoyao-San, inhibits apoptosis in hydrogen peroxide-induced PC12 cells by preventing cytochrome c release and inactivating of caspase cascade. 2008 , 32, 304-11 | 43 |
| 1277 | Conjugated linoleic acid inhibits Caco-2 cell growth via ERK-MAPK signaling pathway. 2007 , 18, 332-40 | 29 |
| 1276 | The water extract of Omija protects H9c2 cardiomyoblast cells from hydrogen peroxide through prevention of mitochondrial dysfunction and activation of caspases pathway. 2007 , 21, 81-8 | 11 |
| 1275 | Autophagy delays apoptotic death in breast cancer cells following DNA damage. 2007 , 14, 500-10 | 417 |
| 1274 | p38 MAPK and MSK1 mediate caspase-8 activation in manganese-induced mitochondria-dependent cell death. 2007 , 14, 1826-36 | 73 |
| 1273 | Apoptosis inhibition of alveolar macrophages upon interaction with conidia of <i>Aspergillus fumigatus</i> . 2007 , 275, 250-4 | 12 |
| 1272 | Polycomb group protein RING1B is a direct substrate of Caspases-3 and -9. 2007 , 1773, 844-52 | 12 |
| 1271 | Genistein induces apoptosis in human hepatocellular carcinomas via interaction of endoplasmic reticulum stress and mitochondrial insult. 2007 , 73, 782-92 | 110 |
| 1270 | Curcumin induces apoptosis through mitochondrial hyperpolarization and mtDNA damage in human hepatoma G2 cells. 2007 , 43, 968-75 | 150 |
| 1269 | Porcine reproductive and respiratory syndrome virus induces apoptosis through a mitochondria-mediated pathway. 2007 , 365, 419-34 | 69 |
| 1268 | Differential involvement of reactive oxygen species in apoptosis caused by the inhibition of protein phosphatase 2A in Jurkat and CCRF-CEM human T-leukemia cells. 2007 , 83, 347-56 | 18 |

| | | |
|------|--|-----|
| 1267 | Deregulation of tissue homeostasis in endometria from patients with polycystic ovarian syndrome with and without endometrial hyperplasia. 2007 , 104, 290-5 | 32 |
| 1266 | Loss of T cell responses following long-term cryopreservation. 2007 , 326, 93-115 | 74 |
| 1265 | Total synthesis of lejimalide A-D and assessment of the remarkable actin-depolymerizing capacity of these polyene macrolides. 2007 , 129, 9150-61 | 130 |
| 1264 | Effect of methanolic extract from silkworm droppings on proliferation and caspase activity in HT-29 human colon cancer cells. 2007 , 10, 467-72 | 21 |
| 1263 | Attenuated Leishmanial sphingolipid induces apoptosis in A375 human melanoma cell via both caspase-dependent and -independent pathways. 2007 , 304, 143-54 | 3 |
| 1262 | Alpha1,3 Fucosyltransferase-VII modifies the susceptibility of apoptosis induced by ultraviolet and retinoic acid in human hepatocarcinoma cells. 2007 , 24, 207-20 | 14 |
| 1261 | Up-regulation of CD95 (Apo-1/Fas) is associated with spermatocyte apoptosis during the first round of spermatogenesis in the rat. 2007 , 12, 499-512 | 48 |
| 1260 | Rapid cold-hardening protects <i>Drosophila melanogaster</i> from cold-induced apoptosis. 2007 , 12, 1183-93 | 103 |
| 1259 | The apoptotic effect of intercalating agents on HPV-negative cervical cancer C-33A cells. 2007 , 33, 105-12 | 3 |
| 1258 | Heat shock genes - integrating cell survival and death. 2007 , 32, 595-610 | 357 |
| 1257 | Erythroid expansion and survival in response to acute anemia stress: the role of EPO receptor, GATA-1, Bcl-xL and caspase-3. 2008 , 32, 966-78 | 16 |
| 1256 | Casiopeina III-ia induces apoptosis in HCT-15 cells in vitro through caspase-dependent mechanisms and has antitumor effect in vivo. 2008 , 21, 17-28 | 87 |
| 1255 | External Qi of Yan Xin Qigong induces G2/M arrest and apoptosis of androgen-independent prostate cancer cells by inhibiting Akt and NF-kappa B pathways. 2008 , 310, 227-34 | 27 |
| 1254 | Sorbitol-induced apoptosis of human leukemia is mediated by caspase activation and cytochrome c release. 2008 , 82, 371-7 | 13 |
| 1253 | Fas death pathway in sarcomas correlates with epidermal growth factor transcription. 2008 , 466, 2092-8 | 3 |
| 1252 | Taurine reduces caspase-8 and caspase-9 expression induced by ischemia in the mouse hypothalamic nuclei. 2008 , 34, 169-74 | 49 |
| 1251 | Protective effect of oxidative stress in HaCaT keratinocytes expressing E7 oncogene. 2008 , 34, 135-41 | 18 |
| 1250 | Myrtucommulone from <i>Myrtus communis</i> induces apoptosis in cancer cells via the mitochondrial pathway involving caspase-9. 2008 , 13, 119-31 | 84 |

| | | |
|------|---|-----|
| 1249 | The novel phospholipase C activator, m-3M3FBS, induces apoptosis in tumor cells through caspase activation, down-regulation of XIAP and intracellular calcium signaling. 2008 , 13, 133-45 | 13 |
| 1248 | Induction of apoptosis by withaferin A in human leukemia U937 cells through down-regulation of Akt phosphorylation. 2008 , 13, 1494-504 | 103 |
| 1247 | Construction and analysis of a modular model of caspase activation in apoptosis. 2008 , 5, 26 | 77 |
| 1246 | Electrical stimulation of cerebellar fastigial nucleus protects rat brain, in vitro, from staurosporine-induced apoptosis. 2001 , 79, 328-38 | 23 |
| 1245 | Treatment of PC-3 and DU145 prostate cancer cells by prenylflavonoids from hop (<i>Humulus lupulus</i> L.) induces a caspase-independent form of cell death. 2008 , 22, 197-203 | 65 |
| 1244 | Gene expression changes in a transgenic mouse model overexpressing human wildtype and mutant torsinA. 2008 , 2, 720-36 | 3 |
| 1243 | Profiling of apoptosis genes identifies distinct types of primary cutaneous large B cell lymphoma. 2008 , 215, 340-6 | 17 |
| 1242 | Caspase inhibitor facilitates recovery of hearing by protecting the cochlear lateral wall from acute cochlear mitochondrial dysfunction. 2008 , 86, 215-22 | 23 |
| 1241 | A superoxide anion generator, pyrogallol, inhibits the growth of HeLa cells via cell cycle arrest and apoptosis. 2008 , 47, 114-25 | 32 |
| 1240 | Identification of polymorphisms in the Caspase-3 gene and their association with lung cancer risk. 2008 , 47, 383-90 | 23 |
| 1239 | BimEL-dependent apoptosis induced in peripheral blood lymphocytes with n-butyric acid is moderated by variation in expression of c-myc and p21(WAF1). 2008 , 26, 509-21 | 4 |
| 1238 | Increased intracellular [dATP] enhances cardiac contraction in embryonic chick cardiomyocytes. 2008 , 104, 2217-27 | 9 |
| 1237 | Emodin inhibits TNF-alpha-induced human aortic smooth-muscle cell proliferation via caspase- and mitochondrial-dependent apoptosis. 2008 , 105, 70-80 | 48 |
| 1236 | Constitutive neutrophil apoptosis: mechanisms and regulation. 2008 , 83, 288-95 | 213 |
| 1235 | A potent reporter applicable to the monitoring of caspase-3-dependent proteolytic cleavage. 2008 , 138, 17-23 | 2 |
| 1234 | Synthesis, characterization, and intracellular delivery of reducible heparin nanogels for apoptotic cell death. 2008 , 29, 3376-83 | 97 |
| 1233 | Chitooligosaccharides induce apoptosis of human hepatocellular carcinoma cells via up-regulation of Bax. 2008 , 71, 509-514 | 54 |
| 1232 | 2,4-Dinitrophenol induces apoptosis in As4.1 juxtglomerular cells through rapid depletion of GSH. 2008 , 32, 1536-45 | 5 |

| | | |
|------|---|-----|
| 1231 | Dynamic effects of autophagy on arsenic trioxide-induced death of human leukemia cell line HL60 cells. 2008 , 29, 123-34 | 46 |
| 1230 | Ginkgo biloba extract prevents against apoptosis induced by high glucose in human lens epithelial cells. 2008 , 29, 1042-50 | 21 |
| 1229 | DYRK1A phosphorylates caspase 9 at an inhibitory site and is potently inhibited in human cells by harmine. 2008 , 275, 6268-80 | 91 |
| 1228 | Induction of apoptosis by shikonin through a ROS/JNK-mediated process in Bcr/Abl-positive chronic myelogenous leukemia (CML) cells. 2008 , 18, 879-88 | 178 |
| 1227 | Inhibition of CED-3 zymogen activation and apoptosis in <i>Caenorhabditis elegans</i> by caspase homolog CSP-3. 2008 , 15, 1094-101 | 28 |
| 1226 | Enhanced effects of xanthohumol plus honokiol on apoptosis in 3T3-L1 adipocytes. 2008 , 16, 1232-8 | 23 |
| 1225 | Involvement of both endoplasmic reticulum- and mitochondria-dependent pathways in cardiotoxin III-induced apoptosis in HL-60 cells. 2008 , 35, 1059-64 | 22 |
| 1224 | Increased susceptibility to tumor necrosis factor-alpha in butyric acid-induced apoptosis is caused by downregulation of cFLIP expression in Jurkat T cells. 2008 , 52, 188-96 | 2 |
| 1223 | Cantharidin induces apoptosis of human multiple myeloma cells via inhibition of the JAK/STAT pathway. 2008 , 99, 1820-6 | 51 |
| 1222 | Cell proliferation, apoptosis and mitochondrial damage in rat B50 neuronal cells after cisplatin treatment. 2008 , 41, 506-20 | 35 |
| 1221 | D2/D3 receptor agonist ropinirole protects dopaminergic cell line against rotenone-induced apoptosis through inhibition of caspase- and JNK-dependent pathways. 2008 , 582, 603-10 | 44 |
| 1220 | Thioredoxin 2 haploinsufficiency in mice results in impaired mitochondrial function and increased oxidative stress. 2008 , 44, 882-92 | 88 |
| 1219 | Rapid reactive oxygen species (ROS) generation induced by curcumin leads to caspase-dependent and -independent apoptosis in L929 cells. 2008 , 45, 1403-12 | 186 |
| 1218 | Caspase-independent apoptosis in yeast. 2008 , 1783, 1311-9 | 47 |
| 1217 | Neuroglobin protects PC12 cells against oxidative stress. 2008 , 1190, 159-66 | 87 |
| 1216 | Sargaquinoic acid and sargachromenol, extracts of <i>Sargassum sagamianum</i> , induce apoptosis in HaCaT cells and mice skin: Its potentiation of UVB-induced apoptosis. 2008 , 582, 1-11 | 38 |
| 1215 | Catechin and proanthocyanidin B4 from grape seeds prevent doxorubicin-induced toxicity in cardiomyocytes. 2008 , 591, 96-101 | 43 |
| 1214 | Nuclear mechanisms of hypoxic cerebral injury in the newborn: the role of caspases. 2008 , 32, 334-43 | 11 |

| | | |
|------|---|-----|
| 1213 | NF-kappaB inhibition is involved in tobacco smoke-induced apoptosis in the lungs of rats. 2008 , 230, 150-8 | 31 |
| 1212 | Environmental neurotoxin dieldrin induces apoptosis via caspase-3-dependent proteolytic activation of protein kinase C delta (PKCdelta): Implications for neurodegeneration in Parkinson's disease. 2008 , 1, 12 | 51 |
| 1211 | Apoptosome assembly. 2008 , 442, 141-56 | 12 |
| 1210 | Mechanisms and methods in glucose metabolism and cell death. 2008 , 442, 439-57 | 29 |
| 1209 | REVIEW paper: pathophysiology of myocardial reperfusion injury: the role of genetically engineered mouse models. 2008 , 45, 698-706 | 6 |
| 1208 | RETRACTED: Resveratrol induces apoptosis involving mitochondrial pathways in mouse skin tumorigenesis. 2008 , 82, 348-58 | 80 |
| 1207 | Tanshinone IIA, an isolated compound from <i>Salvia miltiorrhiza</i> Bunge, induces apoptosis in HeLa cells through mitotic arrest. 2008 , 83, 394-403 | 49 |
| 1206 | Cancer as robust intrinsic state of endogenous molecular-cellular network shaped by evolution. 2008 , 70, 678-84 | 114 |
| 1205 | Neuroglobin protects PC12 cells against beta-amyloid-induced cell injury. 2008 , 29, 1815-22 | 69 |
| 1204 | Heat shock treatment increases engraftment of transplanted human myoblasts into immunodeficient mice. 2008 , 40, 624-30 | 26 |
| 1203 | Protocatechuic acid inhibits apoptosis by mitochondrial dysfunction in rotenone-induced PC12 cells. 2008 , 22, 430-7 | 60 |
| 1202 | 2,4-dinitrophenol induces G1 phase arrest and apoptosis in human pulmonary adenocarcinoma Calu-6 cells. 2008 , 22, 659-70 | 40 |
| 1201 | Salvianolic acid B, an antioxidant from <i>Salvia miltiorrhiza</i> , prevents 6-hydroxydopamine induced apoptosis in SH-SY5Y cells. 2008 , 40, 409-22 | 77 |
| 1200 | Multitargeted therapy of cancer by tocotrienols. 2008 , 269, 388-95 | 64 |
| 1199 | Synthetic chenodeoxycholic acid derivative, HS-1200, induces apoptosis of human hepatoma cells via a mitochondrial pathway. 2008 , 270, 242-9 | 15 |
| 1198 | Ginsenoside Rd prevents and rescues rat intestinal epithelial cells from irradiation-induced apoptosis. 2008 , 46, 3080-9 | 31 |
| 1197 | Both the N-terminal fragment and the protein-protein interaction domain (PDZ domain) are required for the pro-apoptotic activity of presenilin-associated protein PSAP. 2008 , 1780, 696-708 | 7 |
| 1196 | TIPE2, a negative regulator of innate and adaptive immunity that maintains immune homeostasis. 2008 , 133, 415-26 | 260 |

| | | |
|------|---|-----|
| 1195 | Neuronal apoptosis and autophagy cross talk in aging PS/APP mice, a model of Alzheimer's disease. 2008 , 173, 665-81 | 126 |
| 1194 | Activation of apoptosis by 1-hydroxy-5,7-dimethoxy-2-naphthalene-carboxaldehyde, a novel compound from <i>Aegle marmelos</i> . 2008 , 68, 8573-81 | 49 |
| 1193 | The life of a cell: apoptosis regulation by the PI3K/PKB pathway. 2008 , 415, 333-44 | 299 |
| 1192 | CASP3 polymorphisms and risk of squamous cell carcinoma of the head and neck. 2008 , 14, 6343-9 | 44 |
| 1191 | 2-(4-(Tetrahydro-2H-pyran-2-yloxy)-undecyl)-propane-1,3-diamminedichloroplatinum(II): a novel platinum compound that overcomes cisplatin resistance and induces apoptosis by mechanisms different from that of cisplatin. 2008 , 51, 5413-22 | 24 |
| 1190 | iNOS gene silencing prevents inflammatory cytokine-induced beta-cell apoptosis. 2008 , 5, 407-17 | 25 |
| 1189 | Identification of E1AF as a target gene of E2F1-induced apoptosis in response to DNA damage. 2008 , 144, 539-46 | 4 |
| 1188 | Dependence of reactive oxygen species and FLICE inhibitory protein on lipofectamine-induced apoptosis in human lung epithelial cells. 2008 , 325, 969-77 | 33 |
| 1187 | Tat-induced FOXO3a is a key mediator of apoptosis in HIV-1-infected human CD4+ T lymphocytes. 2008 , 181, 8460-77 | 45 |
| 1186 | Targeting IAP (inhibitor of apoptosis) proteins for therapeutic intervention in tumors. 2008 , 8, 110-7 | 32 |
| 1185 | Noninvasive imaging of apoptosis and its application in cancer therapeutics. 2008 , 14, 2492-501 | 72 |
| 1184 | Gender-related differences in apoptotic pathways after neonatal cerebral ischemia. 2008 , 14, 46-52 | 78 |
| 1183 | Luteolin suppresses cisplatin-induced apoptosis in auditory cells: possible mediation through induction of heme oxygenase-1 expression. 2008 , 11, 230-6 | 34 |
| 1182 | The docking interaction of caspase-9 with ERK2 provides a mechanism for the selective inhibitory phosphorylation of caspase-9 at threonine 125. 2008 , 283, 3854-65 | 30 |
| 1181 | Methylseleninic acid enhances taxane drug efficacy against human prostate cancer and down-regulates antiapoptotic proteins Bcl-XL and survivin. 2008 , 14, 1150-8 | 51 |
| 1180 | Oncogene AF1q enhances doxorubicin-induced apoptosis through BAD-mediated mitochondrial apoptotic pathway. 2008 , 7, 3160-8 | 20 |
| 1179 | A balance between NF- κ B and p53 governs the pro- and anti-apoptotic transcriptional response. 2008 , 36, 1415-28 | 69 |
| 1178 | Apoptosis-inducing factor is a target for ubiquitination through interaction with XIAP. 2008 , 28, 237-47 | 52 |

| | | |
|------|---|-----|
| 1177 | Characterization of cell-death pathways in Punta Toro virus-induced hepatocyte injury. 2008 , 89, 2175-2181 | 3 |
| 1176 | (-)-Epigallocatechin gallate regulates CD3-mediated T cell receptor signaling in leukemia through the inhibition of ZAP-70 kinase. 2008 , 283, 28370-9 | 83 |
| 1175 | Histopathologic and immunohistochemical features of tissue adherent to multined electrodes after RF ablation of liver malignancies can help predict local tumor progression: initial results. 2008 , 249, 364-74 | 52 |
| 1174 | [Influence of neoadjuvant chemotherapy on liver integrity and ischemic tolerance]. 2008 , 46, 17-21 | 10 |
| 1173 | The pak4 protein kinase plays a key role in cell survival and tumorigenesis in athymic mice. 2008 , 6, 1215-24 | 111 |
| 1172 | (Un)expected roles of c-IAPs in apoptotic and NFkappaB signaling pathways. 2008 , 7, 1511-21 | 106 |
| 1171 | Activation of Erk1/2 and Akt following unilateral ureteral obstruction. 2008 , 74, 196-209 | 66 |
| 1170 | Otoprotection and inner ear regeneration. 2008 , 6, 170-175 | 9 |
| 1169 | Ischemic preconditioning: from molecular mechanisms to therapeutic opportunities. 2008 , 10, 207-47 | 81 |
| 1168 | Kaempferol protects ischemia/reperfusion-induced cardiac damage through the regulation of endoplasmic reticulum stress. 2008 , 30, 257-70 | 44 |
| 1167 | SYK-dependent tonic B-cell receptor signaling is a rational treatment target in diffuse large B-cell lymphoma. 2008 , 111, 2230-7 | 262 |
| 1166 | Different mechanisms of DEHP-induced hepatocellular adenoma tumorigenesis in wild-type and Ppar alpha-null mice. 2008 , 50, 169-80 | 52 |
| 1165 | A molecular approach to apoptosis in the human heart during brain death. 2008 , 86, 977-82 | 10 |
| 1164 | Computational insights on the competing effects of nitric oxide in regulating apoptosis. 2008 , 3, e2249 | 21 |
| 1163 | Bid participates in genotoxic drug-induced apoptosis of HeLa cells and is essential for death receptor ligands' apoptotic and synergistic effects. 2008 , 3, e2844 | 23 |
| 1162 | TNF: a moonlighting protein at the interface between cancer and infection. 2008 , 13, 5374-86 | 29 |
| 1161 | Involvement of cPLA2 inhibition in dexamethasone-induced thymocyte apoptosis. 2008 , 21, 539-51 | 8 |
| 1160 | Effect of unilateral ureteral obstruction and anti-angiotensin II treatment on renal tubule and interstitial cell apoptosis in rats. 2008 , 49, 600-7 | 12 |

| | | |
|------|---|-----|
| 1159 | The molecular "Jekyll and Hyde" duality of PARP1 in cell death and cell survival. 2009 , 14, 72-111 | 46 |
| 1158 | Cardiac Physiology and Pharmacology. 2009 , 361-395 | |
| 1157 | Growth factor receptors and apoptosis regulators: signaling pathways, prognosis, chemosensitivity and treatment outcomes of breast cancer. 2009 , 3, 47-60 | 8 |
| 1156 | Trovaflaxacin enhances TNF-induced inflammatory stress and cell death signaling and reduces TNF clearance in a murine model of idiosyncratic hepatotoxicity. 2009 , 111, 288-301 | 35 |
| 1155 | Tumor necrosis factor-alpha induces caspase-mediated cleavage of peroxisome proliferator-activated receptor gamma in adipocytes. 2009 , 284, 17082-17091 | 38 |
| 1154 | Re: Assessment of viable tumour tissue attached to needle applicators after local ablation of liver tumours. 2009 , 26, 434-5; author reply 435 | |
| 1153 | PHAPI/pp32 suppresses tumorigenesis by stimulating apoptosis. 2009 , 284, 6946-54 | 28 |
| 1152 | Anti-tumor activity and immunological modification of ribosome-inactivating protein (RIP) from <i>Momordica charantia</i> by covalent attachment of polyethylene glycol. 2009 , 41, 792-9 | 27 |
| 1151 | Bioluminescence. 2009 , | 1 |
| 1150 | Rhein inhibits TNF-alpha-induced human aortic smooth muscle cell proliferation via mitochondrial-dependent apoptosis. 2009 , 46, 375-86 | 23 |
| 1149 | Antiapoptotic role for ornithine decarboxylase during oocyte maturation. 2009 , 29, 1786-95 | 19 |
| 1148 | Lambda-carrageenan oligosaccharides elicit reactive oxygen species production resulting in mitochondrial-dependent apoptosis in human umbilical vein endothelial cells. 2009 , 24, 801-6 | 12 |
| 1147 | Apoptosis and apoptosis-based therapy in lung cancer. 2009 , 9, 952-7 | 9 |
| 1146 | Bisphenol A exposure induces apoptosis and upregulation of Fas/FasL and caspase-3 expression in the testes of mice. 2009 , 108, 427-36 | 131 |
| 1145 | Caspase-10-mediated heat shock protein 90 beta cleavage promotes UVB irradiation-induced cell apoptosis. 2009 , 29, 3657-64 | 23 |
| 1144 | Inhibition of caspase-mediated anoikis is critical for basic fibroblast growth factor-sustained culture of human pluripotent stem cells. 2009 , 284, 34054-64 | 54 |
| 1143 | Real-time detection of caspase-3-like protease activation in vivo using fluorescence resonance energy transfer during plant programmed cell death induced by ultraviolet C overexposure. 2009 , 150, 1773-83 | 52 |
| 1142 | In vitro testing of biomaterials toxicity and biocompatibility. 2009 , 508-537 | 3 |

| | | |
|------|---|-----|
| 1141 | Transcriptomic response of sea urchin larvae <i>Strongylocentrotus purpuratus</i> to CO ₂ -driven seawater acidification. 2009 , 212, 2579-94 | 211 |
| 1140 | Epidermal growth factor-induced proliferation of chicken primordial germ cells: involvement of calcium/protein kinase C and NFκB1. 2009 , 80, 528-36 | 26 |
| 1139 | Pentagalloylglucose induces autophagy and caspase-independent programmed deaths in human PC-3 and mouse TRAMP-C2 prostate cancer cells. 2009 , 8, 2833-43 | 40 |
| 1138 | Molecular biology II: protein function. 2009 , 27, 150-152 | |
| 1137 | Sulforaphane enhances caspase-dependent apoptosis through inhibition of cyclooxygenase-2 expression in human oral squamous carcinoma cells and nude mouse xenograft model. 2009 , 45, 654-60 | 17 |
| 1136 | Prosurvival Bcl-2 proteins stabilize pancreatic mitochondria and protect against necrosis in experimental pancreatitis. 2009 , 315, 1975-89 | 59 |
| 1135 | Apoptotic effects of curcumin on human osteosarcoma U2OS cells. 2009 , 1, 144-52 | 23 |
| 1134 | The effects of indomethacin on caspases, glutathione level and lipid peroxidation in the newborn rats with hypoxic-ischemic cerebral injury. 2009 , 1289, 118-23 | 16 |
| 1133 | <i>Leishmania mexicana</i> : inhibition of camptothecin-induced apoptosis of monocyte-derived dendritic cells. 2009 , 121, 199-207 | 24 |
| 1132 | Transcriptomic and proteomic approach to studying SNX-2112-induced K562 cells apoptosis and anti-leukemia activity in K562-NOD/SCID mice. 2009 , 583, 1859-66 | 33 |
| 1131 | Pyrogallol inhibits the growth of lung cancer Calu-6 cells via caspase-dependent apoptosis. 2009 , 177, 107-14 | 35 |
| 1130 | TRPC1 inhibits apoptotic cell degeneration induced by dopaminergic neurotoxin MPTP/MPP(+). 2009 , 46, 209-18 | 71 |
| 1129 | NAP protects against cytochrome c release: inhibition of the initiation of apoptosis. 2009 , 618, 9-14 | 29 |
| 1128 | Sequence dependence of cell growth inhibition by EGFR-tyrosine kinase inhibitor ZD1839, docetaxel, and cisplatin in head and neck cancer. 2009 , 31, 1263-73 | 3 |
| 1127 | Valproic acid enhances bosutinib cytotoxicity in colon cancer cells. 2009 , 124, 1990-6 | 26 |
| 1126 | Mre11 inhibition by oncolytic adenovirus associates with autophagy and underlies synergy with ionizing radiation. 2009 , 125, 2441-9 | 25 |
| 1125 | The human 1-8D gene (IFITM2) is a novel p53 independent pro-apoptotic gene. 2009 , 125, 2810-9 | 30 |
| 1124 | Peptides and peptide mimics as modulators of apoptotic pathways. 2009 , 4, 146-60 | 4 |

| | | |
|------|---|-----|
| 1123 | Effects of thymoquinone-fatty acid conjugates on cancer cells. 2009 , 4, 761-8 | 36 |
| 1122 | BBR induces apoptosis in HepG2 cell through an Akt-ASK1-ROS-p38MAPKs-linked cascade. 2010 , 109, 329-38 | 30 |
| 1121 | Ursolic acid overcomes Bcl-2-mediated resistance to apoptosis in prostate cancer cells involving activation of JNK-induced Bcl-2 phosphorylation and degradation. 2010 , 109, 764-73 | 34 |
| 1120 | Astilbotriterpenic acid induces growth arrest and apoptosis in HeLa cells through mitochondria-related pathways and reactive oxygen species (ROS) production. 2009 , 6, 218-30 | 17 |
| 1119 | Induction of apoptosis of detached oral squamous cell carcinoma cells by safinol. Possible role of Bim, focal adhesion kinase and endonuclease G. 2009 , 14, 287-97 | 23 |
| 1118 | Can't live without them, can live with them: roles of caspases during vital cellular processes. 2009 , 14, 980-95 | 106 |
| 1117 | Is caspase inhibition a valid therapeutic strategy in cryopreservation of ovarian tissue?. 2009 , 26, 415-20 | 13 |
| 1116 | Apoptotic signaling induced by benzamide riboside: an in vitro study. 2009 , 328, 67-73 | 8 |
| 1115 | Initiation of oligodendrocyte progenitor cell migration by a PDGF-A activated extracellular regulated kinase (ERK) signaling pathway. 2009 , 34, 169-81 | 67 |
| 1114 | Aspirin-induced mucosal cell death in human gastric cells: role of a caspase-independent mechanism. 2009 , 54, 28-35 | 10 |
| 1113 | The role of cathepsins in involution and breast cancer. 2009 , 14, 171-9 | 25 |
| 1112 | Proteinase-activated receptor-1 mediates allogeneic CD8(+) T cell-induced apoptosis of vascular endothelial cells. 2009 , 26, 379-85 | 4 |
| 1111 | Magnolol induces apoptosis via activation of both mitochondrial and death receptor pathways in A375-S2 cells. 2009 , 32, 1789-94 | 17 |
| 1110 | The anti-apoptotic effects of caspase inhibitors on propyl gallate-treated HeLa cells in relation to reactive oxygen species and glutathione levels. 2009 , 83, 825-33 | 15 |
| 1109 | Ovarian apoptosis after shock wave lithotripsy for distal ureteral stones. 2009 , 37, 69-74 | 8 |
| 1108 | Mycobacterium tuberculosis 38-kDa lipoprotein is apoptogenic for human monocyte-derived macrophages. 2009 , 69, 20-8 | 52 |
| 1107 | Potential role of CXCL10 in the induction of cell injury and mitochondrial dysfunction. 2010 , 91, 210-23 | 14 |
| 1106 | Anticancer oncolytic activity of respiratory syncytial virus. 2009 , 16, 923-35 | 15 |

| | | |
|------|--|-----|
| 1105 | Apoptosis and autophagy: Regulation of caspase-9 by phosphorylation. 2009 , 276, 6063-73 | 143 |
| 1104 | Effects of carbonyl cyanide p-(trifluoromethoxy) phenylhydrazone on the growth inhibition in human pulmonary adenocarcinoma Calu-6 cells. 2009 , 265, 101-7 | 25 |
| 1103 | Iron depletion decreases proliferation and induces apoptosis in a human colonic adenocarcinoma cell line, Caco2. 2009 , 103, 1074-81 | 20 |
| 1102 | Boolean network-based analysis of the apoptosis network: irreversible apoptosis and stable surviving. 2009 , 259, 760-9 | 56 |
| 1101 | Polymorphisms in the CASPASE genes and survival in patients with early-stage non-small-cell lung cancer. 2009 , 27, 5823-9 | 36 |
| 1100 | Phyllanthus amarus inhibits cell growth and induces apoptosis in Dalton's lymphoma ascites cells through activation of caspase-3 and downregulation of Bcl-2. 2009 , 8, 190-4 | 17 |
| 1099 | Inhibition of UV-C light-induced apoptosis in liver cells by 2,3,7,8-tetrachlorodibenzo-p-dioxin. 2009 , 111, 49-63 | 41 |
| 1098 | Requirement of the JNK-associated Bcl-2 pathway for human lactoferrin-induced apoptosis in the Jurkat leukemia T cell line. 2009 , 91, 102-8 | 43 |
| 1097 | Phosphorylation of Bcl-2 and activation of caspase-3 via the c-Jun N-terminal kinase pathway in ursolic acid-induced DU145 cells apoptosis. 2009 , 91, 1173-9 | 43 |
| 1096 | Caspase substrates and neurodegenerative diseases. 2009 , 80, 251-67 | 32 |
| 1095 | Expression of TBX2 promotes anchorage-independent growth and survival in the p53-negative SW13 adrenocortical carcinoma. 2009 , 278, 230-240 | 18 |
| 1094 | Cyclooxygenase-2/prostaglandin E2 pathway mediates icariside II induced apoptosis in human PC-3 prostate cancer cells. 2009 , 280, 93-100 | 64 |
| 1093 | Waltonitone induces human hepatocellular carcinoma cells apoptosis in vitro and in vivo. 2009 , 286, 223-31 | 17 |
| 1092 | In vitro protective effects of pyrroloquinoline quinone on methylmercury-induced neurotoxicity. 2009 , 27, 103-10 | 21 |
| 1091 | Ethanollic Hwaeumjeon induces mitochondrial dependent apoptosis partly via PI3K/AKT/HSP27/ERK pathways and inhibits PSA and AR in LNCaP cells. 2009 , 28, 78-85 | 3 |
| 1090 | Protective effect of Bojungbangdocktang on cisplatin-induced cytotoxicity and apoptosis in MCF-10A breast endothelial cells. 2009 , 28, 430-8 | 9 |
| 1089 | Mustard NPR1, a mammalian IkappaB homologue inhibits NF-kappaB activation in human GBM cell lines. 2009 , 390, 427-33 | 11 |
| 1088 | Involvement of Fas/FasL system in apoptotic signaling in testicular germ cells of male Wistar rats injected i.v. with microcystins. 2009 , 54, 1-7 | 43 |

| | | |
|------|--|-----|
| 1087 | Brain death effects on catecholamine levels and subsequent cardiac damage assessed in organ donors. 2009 , 28, 815-20 | 38 |
| 1086 | N-acetylcysteine prevents glucose/glucose oxidase-induced oxidative stress, mitochondrial damage and apoptosis in H9c2 cells. 2009 , 84, 328-36 | 73 |
| 1085 | Induction of apoptosis in human hepatocarcinoma SMMC-7721 cells in vitro by flavonoids from <i>Astragalus complanatus</i> . 2009 , 123, 293-301 | 73 |
| 1084 | Apolipoprotein E-deficient mice are more vulnerable to ER stress after transient forebrain ischemia. 2009 , 54, 403-9 | 23 |
| 1083 | The Bcl-2 Family Proteins. 2009 , 25-61 | |
| 1082 | Growth inhibition in antimycin A treated-lung cancer Calu-6 cells via inducing a G1 phase arrest and apoptosis. 2009 , 65, 150-60 | 37 |
| 1081 | Taurine protects rat testes against NaAsO(2)-induced oxidative stress and apoptosis via mitochondrial dependent and independent pathways. 2009 , 187, 201-10 | 169 |
| 1080 | Micro-environmental mechanical stress controls tumor spheroid size and morphology by suppressing proliferation and inducing apoptosis in cancer cells. 2009 , 4, e4632 | 298 |
| 1079 | Modeling, synthesis and biological evaluation of potential retinoid X receptor (RXR) selective agonists: novel analogues of 4-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethynyl]benzoic acid (bexarotene). 2009 , 52, 5950-66 | 44 |
| 1078 | Effects of elastase inhibitor on the epithelial cell apoptosis in bleomycin-induced pulmonary fibrosis. 2009 , 35, 817-29 | 18 |
| 1077 | CO and bilirubin inhibit doxorubicin-induced cardiac cell death. 2009 , 31, 64-70 | 20 |
| 1076 | 3-Oxoolean-12-en-27-oic acid isolated from <i>Aceriphyllum rossii</i> induces caspase-8-dependent apoptosis in human promyelocytic leukemia HL-60 cells. 2009 , 32, 91-8 | 5 |
| 1075 | PRIMA-1 inhibits growth of breast cancer cells by re-activating mutant p53 protein. 2009 , 35, 1015-23 | 37 |
| 1074 | Cell growth regulation through apoptosis by activin in human gastric cancer SNU-16 cell lines. 2009 , | |
| 1073 | Curcumin induces apoptosis through FAS and FADD, in caspase-3-dependent and -independent pathways in the N18 mouse-rat hybrid retina ganglion cells. 2009 , 22, 97-104 | 30 |
| 1072 | Neuronal phosphorylated RNA-dependent protein kinase in Creutzfeldt-Jakob disease. 2009 , 68, 190-8 | 24 |
| 1071 | Neonatal Necrotizing Enterocolitis -Inflammation and Intestinal Immaturity. 2009 , 8, 248-259 | 67 |
| 1070 | Polymorphisms in the caspase genes and the risk of lung cancer. 2010 , 5, 1152-8 | 31 |

| | | |
|------|--|-----|
| 1069 | Insights into sepsis therapeutic design based on the apoptotic death pathway. 2010 , 114, 354-65 | 41 |
| 1068 | The injured cochlea as a target for inflammatory processes, initiation of cell death pathways and application of related otoprotectives strategies. 2010 , 5, 147-63 | 103 |
| 1067 | Ginsenoside Rb1 protects PC12 cells against β -amyloid-induced cell injury. 2010 , 3, 635-9 | 30 |
| 1066 | A <i>Torilis japonica</i> extract exerts anti-proliferative activities on the U87MG human glioblastoma cell line. 2010 , 3, 1041-5 | 5 |
| 1065 | Impacts of forebrain neuronal glycine transporter 1 disruption in the senescent brain: evidence for age-dependent phenotypes in Pavlovian learning. 2010 , 124, 839-50 | 11 |
| 1064 | Decursin prevents cisplatin-induced apoptosis via the enhancement of antioxidant enzymes in human renal epithelial cells. 2010 , 33, 1279-84 | 23 |
| 1063 | Tanshinone IIA induces mitochondria dependent apoptosis in prostate cancer cells in association with an inhibition of phosphoinositide 3-kinase/AKT pathway. 2010 , 33, 1828-34 | 66 |
| 1062 | Mechanism of tetramethylpyrazine analogue CXC195 inhibition of hydrogen peroxide-induced apoptosis in human endothelial cells. 2010 , 33, 432-8 | 19 |
| 1061 | Molecular mechanisms of toxicity of simvastatin, widely used cholesterol-lowering drug. A review. 2010 , 5, 269-279 | 3 |
| 1060 | Turmeric-based diet can delay apoptosis without modulating NF-kappaB in unilateral ureteral obstruction in rats. 2008 , 60, 83-9 | 16 |
| 1059 | <i>Helicobacter hepaticus</i> cytolethal distending toxin causes cell death in intestinal epithelial cells via mitochondrial apoptotic pathway. 2010 , 15, 98-107 | 38 |
| 1058 | Cellular apoptosis by nanosecond, high-intensity electric pulses: model evaluation of the pulsing threshold and extrinsic pathway. 2010 , 79, 179-86 | 12 |
| 1057 | Bee venom protects hepatocytes from tumor necrosis factor-alpha and actinomycin D. 2010 , 33, 215-23 | 25 |
| 1056 | Quercetin-mediated cell cycle arrest and apoptosis involving activation of a caspase cascade through the mitochondrial pathway in human breast cancer MCF-7 cells. 2010 , 33, 1181-91 | 205 |
| 1055 | Neuroprotective effect of baicalein on hydrogen peroxide-mediated oxidative stress and mitochondrial dysfunction in PC12 cells. 2010 , 40, 311-20 | 61 |
| 1054 | Characterization of ochratoxin A-induced apoptosis in primary rat hepatocytes. 2010 , 26, 239-54 | 37 |
| 1053 | Inhibition of apoptosis by 2,3,7,8-tetrachlorodibenzo-p-dioxin depends on protein biosynthesis. 2010 , 26, 391-401 | 16 |
| 1052 | Association and impact of XPG Asp 1104 His gene polymorphism in HIV 1 disease progression to AIDS among north Indian HIV seropositive individuals. 2010 , 37, 317-24 | 6 |

| | | |
|------|---|----|
| 1051 | Conventional apoptosis assays using propidium iodide generate a significant number of false positives that prevent accurate assessment of cell death. 2010 , 358, 81-92 | 51 |
| 1050 | Role of nuclear factor-kappaB and P53 in radioadaptive response in Chang live cells. 2010 , 688, 66-71 | 9 |
| 1049 | Catalpol inhibits apoptosis in hydrogen peroxide-induced endothelium by activating the PI3K/Akt signaling pathway and modulating expression of Bcl-2 and Bax. 2010 , 628, 155-63 | 66 |
| 1048 | Apoptosis and cancer stem cells: Implications for apoptosis targeted therapy. 2010 , 80, 423-30 | 62 |
| 1047 | Phloroglucinol (1,3,5-trihydroxybenzene) protects against ionizing radiation-induced cell damage through inhibition of oxidative stress in vitro and in vivo. 2010 , 185, 215-26 | 53 |
| 1046 | Butyrate induces cell apoptosis through activation of JNK MAP kinase pathway in human colon cancer RKO cells. 2010 , 185, 174-81 | 97 |
| 1045 | Coupling cellular mitogenesis to apoptosis by designed biomolecules. 2010 , 22, 190-6 | 2 |
| 1044 | Bid cleavage, cytochrome c release and caspase activation in canine coronavirus-induced apoptosis. 2010 , 141, 36-45 | 22 |
| 1043 | Ursolic acid induces PC-3 cell apoptosis via activation of JNK and inhibition of Akt pathways in vitro. 2010 , 49, 374-85 | 58 |
| 1042 | Characterization of BAG3 cleavage during apoptosis of pancreatic cancer cells. 2010 , 224, 94-100 | 11 |
| 1041 | Plumbagin induces ROS-mediated apoptosis in human promyelocytic leukemia cells in vivo. 2010 , 34, 658-65 | 85 |
| 1040 | CWJ-081, a novel 3-arylisoquinoline derivative, induces apoptosis in human leukemia HL-60 cells partially involves reactive oxygen species through c-Jun NH2-terminal kinase pathway. 2010 , 20, 6447-51 | 15 |
| 1039 | Neuroprotection by taurine in ethanol-induced apoptosis in the developing cerebellum. 2010 , 17 Suppl 1, S12 | 39 |
| 1038 | The effect of marathon on mRNA expression of anti-apoptotic and pro-apoptotic proteins and sirtuins family in male recreational long-distance runners. 2010 , 10, 7 | 27 |
| 1037 | Hydrogen sulfide induces apoptosis in human periodontium cells. 2010 , 45, 71-8 | 49 |
| 1036 | Synthetic constrained peptide selectively binds and antagonizes death receptor 5. 2010 , 277, 1653-65 | 15 |
| 1035 | Nuclear entry of active caspase-3 is facilitated by its p3-recognition-based specific cleavage activity. 2010 , 20, 211-22 | 40 |
| 1034 | Non-cytotoxic antiviral activities of granzymes in the context of the immune antiviral state. 2010 , 235, 128-46 | 45 |

| | | |
|------|---|-----|
| 1033 | Bioelectric effects of intense ultrashort pulses. 2010 , 38, 255-304 | 100 |
| 1032 | Apoptosis Signaling: A Means to an End. 2010 , 2535-2543 | |
| 1031 | The Role of Fas-FasL Signaling Pathway in Induction of Apoptosis in Patients with Sulfur Mustard-Induced Chronic Bronchiolitis. 2010 , 2010, 373612 | 28 |
| 1030 | Propyl gallate inhibits the growth of endothelial cells, especially calf pulmonary arterial endothelial cells via caspase-independent apoptosis. 2010 , 25, 937-44 | 2 |
| 1029 | Use of human cancer cell lines mitochondria to explore the mechanisms of BH3 peptides and ABT-737-induced mitochondrial membrane permeabilization. 2010 , 5, e9924 | 37 |
| 1028 | Axonal degeneration is regulated by the apoptotic machinery or a NAD ⁺ -sensitive pathway in insects and mammals. 2010 , 30, 6375-86 | 119 |
| 1027 | Butyric acid induces apoptosis via oxidative stress in Jurkat T-cells. 2010 , 89, 689-94 | 15 |
| 1026 | Meningococcal porin PorB prevents cellular apoptosis in a toll-like receptor 2- and NF-kappaB-independent manner. 2010 , 78, 994-1003 | 21 |
| 1025 | Cleavage of survivin by Granzyme M triggers degradation of the survivin-X-linked inhibitor of apoptosis protein (XIAP) complex to free caspase activity leading to cytolysis of target tumor cells. 2010 , 285, 18326-35 | 38 |
| 1024 | Is FAS/Fas ligand system involved in equine corpus luteum functional regression?. 2010 , 83, 901-8 | 26 |
| 1023 | A tolC mutant of Francisella tularensis is hypercytotoxic compared to the wild type and elicits increased proinflammatory responses from host cells. 2010 , 78, 1022-31 | 34 |
| 1022 | Biological response of osteosarcoma cells to size-controlled nanostructured hydroxyapatite. 2010 , 25, 19-37 | 38 |
| 1021 | Inhibition of protein kinase Akt1 by apoptosis signal-regulating kinase-1 (ASK1) is involved in apoptotic inhibition of regulatory volume increase. 2010 , 285, 6109-17 | 27 |
| 1020 | An overview of caspase: Apoptotic protein for silicosis. 2010 , 14, 31-8 | 5 |
| 1019 | Bistability in apoptosis by receptor clustering. 2010 , 6, e1000956 | 29 |
| 1018 | Compound K, a metabolite of ginseng saponin, induces mitochondria-dependent and caspase-dependent apoptosis via the generation of reactive oxygen species in human colon cancer cells. 2010 , 11, 4916-31 | 45 |
| 1017 | A Large-scale genetic association study of esophageal adenocarcinoma risk. 2010 , 31, 1259-63 | 44 |
| 1016 | Sodium 4-phenylbutyrate protects against spinal cord ischemia by inhibition of endoplasmic reticulum stress. 2010 , 52, 1580-6 | 46 |

| | | |
|------|--|-----|
| 1015 | Mitochondrial and endoplasmic reticulum stress pathways cooperate in zearalenone-induced apoptosis of human leukemic cells. 2010 , 3, 50 | 73 |
| 1014 | The mitochondrial protein hTID-1 partners with the caspase-cleaved adenomatous polyposis cell tumor suppressor to facilitate apoptosis. 2010 , 138, 1418-28 | 18 |
| 1013 | Biocompatibility of Polyester Scaffolds with Fibroblasts and Osteoblast-like Cells for Bone Tissue Engineering. 2010 , 25, 567-583 | 38 |
| 1012 | Antitumor activity of capsaicin on human colon cancer cells in vitro and colo 205 tumor xenografts in vivo. 2010 , 58, 12999-3005 | 85 |
| 1011 | Comparable susceptibilities of human 293 cells and insect Tn-5B1-4 cells to photoactivated alpha-terthienyl. 2010 , 58, 2637-42 | 11 |
| 1010 | Activation and specificity of human caspase-10. 2010 , 49, 8307-15 | 50 |
| 1009 | Circulating apoptotic markers in the management of non-small cell lung cancer. 2010 , 6, 197-210 | 11 |
| 1008 | Protective effects of galantamine against Abeta-induced PC12 cell apoptosis by preventing mitochondrial dysfunction and endoplasmic reticulum stress. 2010 , 57, 588-99 | 57 |
| 1007 | Chrysotoxine, a novel bibenzyl compound, inhibits 6-hydroxydopamine induced apoptosis in SH-SY5Y cells via mitochondria protection and NF- κ B modulation. 2010 , 57, 676-89 | 41 |
| 1006 | Caspase-3 activation in the guinea pig cochlea exposed to salicylate. 2010 , 479, 34-9 | 16 |
| 1005 | Investigation on the morphological protective effect of 5-hydroxymethylfurfural extracted from wine-processed Fructus corni on human L02 hepatocytes. 2010 , 130, 424-8 | 32 |
| 1004 | VDAC, a multi-functional mitochondrial protein regulating cell life and death. 2010 , 31, 227-85 | 481 |
| 1003 | Aloe-emodin induces apoptosis of human nasopharyngeal carcinoma cells via caspase-8-mediated activation of the mitochondrial death pathway. 2010 , 291, 46-58 | 70 |
| 1002 | TWEAK/Fn14 promotes apoptosis of human endometrial cancer cells via caspase pathway. 2010 , 294, 91-100 | 29 |
| 1001 | A novel compound modified from tanshinone inhibits tumor growth in vivo via activation of the intrinsic apoptotic pathway. 2010 , 297, 18-30 | 46 |
| 1000 | Inhibition of cadmium-induced apoptosis by glutathione S-transferase P1 via mitogen-activated protein kinases and mitochondrial pathways. 2010 , 30, 202-8 | 8 |
| 999 | Gallic acid inhibits the growth of HeLa cervical cancer cells via apoptosis and/or necrosis. 2010 , 48, 1334-40 | 118 |
| 998 | Evaluation of in vitro anti-proliferative and immunomodulatory activities of compounds isolated from Curcuma longa. 2010 , 48, 2011-20 | 90 |

| | | |
|-----|--|-----|
| 997 | 2',4'-Dihydroxychalcone-induced apoptosis of human gastric cancer MGC-803 cells via down-regulation of survivin mRNA. 2010 , 24, 1333-7 | 18 |
| 996 | Subcellular and metabolic examination of amyloid-beta peptides in Alzheimer disease pathogenesis: evidence for Abeta(25-35). 2010 , 221, 26-37 | 128 |
| 995 | Xeroderma pigmentosum: clues to understanding cancer initiation. 2010 , 28, 93-101 | 3 |
| 994 | Treatment with p38 inhibitor intensifies the death of MG132-treated As4.1 juxtaglomerular cells via the enhancement of GSH depletion. 2010 , 33, 367-76 | 2 |
| 993 | Curcumin-induced apoptosis in PC3 prostate carcinoma cells is caspase-independent and involves cellular ceramide accumulation and damage to mitochondria. 2010 , 62, 379-89 | 65 |
| 992 | Multimodal in vivo imaging and blood monitoring of intrinsic and extrinsic apoptosis. 2011 , 19, 1090-6 | 35 |
| 991 | Anti-tumor and anti-inflammatory properties of ankaflavin and monaphilone A from monascus purpureus NTU 568. 2011 , 59, 1124-30 | 41 |
| 990 | Altered expression of Bcl-2 and Bax in follicles within dehydroepiandrosterone-induced polycystic ovaries in rats. 2011 , 35, 423-9 | 29 |
| 989 | Effect of flavonone hesperidin on the apoptosis of human mammary carcinoma cell line MCF-7. 2011 , 1, 207-215 | 41 |
| 988 | Serum caspase-3 p17 fragment is elevated in patients with ST-segment elevation myocardial infarction: a novel observation. 2011 , 57, 220-1 | 22 |
| 987 | Myocardial salvage index and infarct size represent related but distinct components of acute ST-segment elevation myocardial infarction. 2011 , 57, 221-2; author reply 222 | 1 |
| 986 | Glutathione peroxidase-1 in health and disease: from molecular mechanisms to therapeutic opportunities. 2011 , 15, 1957-97 | 605 |
| 985 | Pardaxin, an antimicrobial peptide, triggers caspase-dependent and ROS-mediated apoptosis in HT-1080 cells. 2011 , 9, 1995-2009 | 66 |
| 984 | Inhibitor of apoptosis proteins: fascinating biology leads to attractive tumor therapeutic targets. 2011 , 7, 633-48 | 47 |
| 983 | Yessotoxin as an apoptotic inducer. 2011 , 57, 947-58 | 32 |
| 982 | Molecular and cellular mechanism of lung injuries due to exposure to sulfur mustard: a review. 2011 , 23, 363-371 | 71 |
| 981 | The release of high mobility group box 1 in apoptosis is triggered by nucleosomal DNA fragmentation. 2011 , 506, 188-93 | 21 |
| 980 | Decursin from <i>Angelica gigas</i> Nakai induces apoptosis in RC-58T/h/SA#4 primary human prostate cancer cells via a mitochondria-related caspase pathway. 2011 , 49, 2517-23 | 17 |

| | | |
|-----|---|----|
| 979 | A possible mechanism for maintenance of the deleterious allele of human CASPASE-12. 2011 , 77, 803-6 | 8 |
| 978 | The extrinsic and intrinsic apoptotic pathways are involved in manganese toxicity in rat astrocytoma C6 cells. 2011 , 59, 297-308 | 49 |
| 977 | Protective effects of quercetin against hydrogen peroxide-induced apoptosis in human neuronal SH-SY5Y cells. 2011 , 504, 223-7 | 69 |
| 976 | The Ts65Dn mouse model of Down syndrome shows reduced expression of the Bcl-X(L) antiapoptotic protein in the hippocampus not accompanied by changes in molecular or cellular markers of cell death. 2011 , 29, 711-6 | 8 |
| 975 | Progallin A isolated from the acetic ether part of the leaves of <i>Phyllanthus emblica</i> L. induces apoptosis of human hepatocellular carcinoma BEL-7404 cells by up-regulation of Bax expression and down-regulation of Bcl-2 expression. 2011 , 133, 765-72 | 20 |
| 974 | <i>Agrimonia pilosa</i> ethanol extract induces apoptotic cell death in HepG2 cells. 2011 , 138, 358-63 | 20 |
| 973 | Immunohistochemical detection of extrinsic and intrinsic mediators of apoptosis in porcine paraffin-embedded tissues. 2011 , 139, 210-6 | 11 |
| 972 | Astragaloside IV inhibits adenovirus replication and apoptosis in A549 cells in vitro. 2011 , 63, 688-94 | 18 |
| 971 | Protective Effect of <i>Coriolus versicolor</i> Cultivated in Citrus Extract Against Nitric Oxide-Induced Apoptosis in Human Neuroblastoma SK-N-MC Cells. 2011 , 20, 100-9 | 12 |
| 970 | Mycophenolic acid mediated mitochondrial membrane potential transition change lead to T lymphocyte apoptosis. 2011 , 81, 235-41 | 6 |
| 969 | Chestnut extract induces apoptosis in AGS human gastric cancer cells. 2011 , 5, 185-91 | 10 |
| 968 | Curcumin induce apoptosis of CNE-2z cells via caspase-dependent mitochondrial intrinsic pathway. 2011 , 5, 1748-1756 | 2 |
| 967 | Adverse effects of simulated hyper- and hypo-phosphatemia on endothelial cell function and viability. 2011 , 6, e23268 | 46 |
| 966 | Unfertilized <i>Xenopus</i> eggs die by Bad-dependent apoptosis under the control of Cdk1 and JNK. 2011 , 6, e23672 | 22 |
| 965 | Impact of multipurpose solutions released from contact lenses on corneal cells. 2011 , 88, 483-92 | 21 |
| 964 | Apoptotic Cell Death in Bronchopulmonary Dysplasia. 2011 , 7, 285-292 | 1 |
| 963 | Wogonin triggers apoptosis in human osteosarcoma U-2 OS cells through the endoplasmic reticulum stress, mitochondrial dysfunction and caspase-3-dependent signaling pathways. 2011 , 39, 217-24 | 32 |
| 962 | pseudo-G-Rh2 induces mitochondrial-mediated apoptosis in SGC-7901 human gastric cancer cells. 2011 , 26, 1441-6 | 9 |

| | | |
|-----|--|-----|
| 961 | Growth of human prostate cancer cells is significantly suppressed in vitro with sodium butyrate through apoptosis. 2012 , 27, 160-7 | 10 |
| 960 | BV6, an IAP antagonist, activates apoptosis and enhances radiosensitization of non-small cell lung carcinoma in vitro. 2011 , 6, 1801-9 | 23 |
| 959 | Analysis of proteomic changes induced upon cellular differentiation of the human intestinal cell line Caco-2. 2011 , 53, 411-26 | 31 |
| 958 | Neurovascular protection by ischaemic tolerance: role of nitric oxide. 2011 , 589, 4137-45 | 15 |
| 957 | Immunohistochemical investigation of bcl-2 and p53 levels in rat hypothalamus after sleep deprivation. 2011 , 47, 458-463 | 3 |
| 956 | Genotoxicity and apoptosis in <i>Drosophila melanogaster</i> exposed to benzene, toluene and xylene: attenuation by quercetin and curcumin. 2011 , 253, 14-30 | 39 |
| 955 | Ellipticine induces apoptosis in human endometrial cancer cells: the potential involvement of reactive oxygen species and mitogen-activated protein kinases. 2011 , 289, 91-102 | 36 |
| 954 | Tumor necrosis factor alpha pathways develops liver apoptosis in type 1 diabetes mellitus. 2011 , 48, 1397-407 | 43 |
| 953 | Retina-specific activation of a sustained hypoxia-like response leads to severe retinal degeneration and loss of vision. 2011 , 41, 119-30 | 17 |
| 952 | Nanoceria extend photoreceptor cell lifespan in tubby mice by modulation of apoptosis/survival signaling pathways. 2011 , 42, 514-23 | 120 |
| 951 | CHM-1 induces apoptosis via p38-mediated upregulation of DR5 expression in human ovarian cancer SKOV3 cells. 2011 , 670, 96-104 | 14 |
| 950 | GL-V9, a newly synthetic flavonoid derivative, induces mitochondrial-mediated apoptosis and G2/M cell cycle arrest in human hepatocellular carcinoma HepG2 cells. 2011 , 670, 13-21 | 27 |
| 949 | Shikonin, a Chinese plant-derived naphthoquinone, induces apoptosis in hepatocellular carcinoma cells through reactive oxygen species: A potential new treatment for hepatocellular carcinoma. 2011 , 51, 2259-71 | 120 |
| 948 | Thermosensitive chitosan-gelatin-glycerol phosphate hydrogel as a controlled release system of ferulic acid for nucleus pulposus regeneration. 2011 , 32, 6953-61 | 91 |
| 947 | Mild hypothermia improves ischemic brain function via attenuating neuronal apoptosis. 2011 , 1368, 59-64 | 29 |
| 946 | Subcellular compartmentalization of proteolytic enzymes in brain regions and the effects of chronic β amyloid treatment. 2011 , 1369, 184-93 | 8 |
| 945 | Carvedilol protects against cisplatin-induced oxidative stress, redox state unbalance and apoptosis in rat kidney mitochondria. 2011 , 189, 45-51 | 46 |
| 944 | Effect of thymol on peripheral blood mononuclear cell PBMC and acute promyelotic cancer cell line HL-60. 2011 , 193, 97-106 | 109 |

| | | |
|-----|--|-----|
| 943 | Synthesis and biological activity of 22-deoxo-23-oxa analogues of saponin OSW-1. 2011 , 54, 3298-305 | 21 |
| 942 | Fe(III)-salen and salphen complexes induce caspase activation and apoptosis in human cells. 2011 , 16, 26-35 | 31 |
| 941 | Induction of the mitochondria apoptosis pathway by phytohemagglutinin erythroagglutinating in human lung cancer cells. 2011 , 18, 848-56 | 10 |
| 940 | Viable tumor tissue adherent to needle applicators after local ablation: a risk factor for local tumor progression. 2011 , 18, 3702-10 | 29 |
| 939 | Degenerative disc disease of herniated intervertebral discs is associated with extracellular matrix remodeling, vimentin-positive cells and cell death. 2011 , 193, 156-62 | 51 |
| 938 | Butylated hydroxyanisole inhibits the growth of HeLa cervical cancer cells via caspase-dependent apoptosis and GSH depletion. 2011 , 349, 179-86 | 9 |
| 937 | Combinatorial effects of thymoquinone on the anti-cancer activity of doxorubicin. 2011 , 67, 867-74 | 101 |
| 936 | Overexpression of aldehyde dehydrogenase-2 attenuates neurotoxicity induced by 4-hydroxynonenal in cultured primary hippocampal neurons. 2011 , 19, 412-22 | 24 |
| 935 | Mechanisms Regulating Microtubule Binding, DNA Replication, and Apoptosis are Controlled by the Intestinal Tumor Suppressor APC. 2011 , 7, 145-151 | 9 |
| 934 | Apoptosis of human cholangiocarcinoma cell lines induced by ßescin through mitochondrial caspase-dependent pathway. 2011 , 25, 1519-26 | 35 |
| 933 | Benzyl isothiocyanate (BITC) and phenethyl isothiocyanate (PEITC)-mediated generation of reactive oxygen species causes cell cycle arrest and induces apoptosis via activation of caspase-3, mitochondria dysfunction and nitric oxide (NO) in human osteogenic sarcoma U-2 OS cells. 2011 , 29, 1199-209 | 89 |
| 932 | Co-overexpression of p21 and Ki-67 in head and neck squamous cell carcinoma relative to a significantly poor prognosis. 2011 , 33, 267-73 | 27 |
| 931 | Destabilization of CARP mRNAs by aloe-emodin contributes to caspase-8-mediated p53-independent apoptosis of human carcinoma cells. 2011 , 112, 1176-91 | 24 |
| 930 | Effects of kinetin riboside on proliferation and proapoptotic activities in human normal and cancer cell lines. 2011 , 112, 2115-24 | 12 |
| 929 | Caspase 3 as a therapeutic target for regulation of intervertebral disc degeneration in rabbits. 2011 , 63, 1648-57 | 70 |
| 928 | Chemopreventive properties of the bran extracted from a newly-developed Thai rice: The Riceberry. 2011 , 125, 978-985 | 76 |
| 927 | Study on potential antitumor mechanism of a novel Schiff base copper(II) complex: synthesis, crystal structure, DNA binding, cytotoxicity and apoptosis induction activity. 2011 , 105, 728-37 | 171 |
| 926 | Dextran sulfate inhibits staurosporine-induced apoptosis in Chinese hamster ovary (CHO) cells: Involvement of the mitochondrial pathway. 2011 , 46, 427-432 | 10 |

| | | |
|-----|--|-----|
| 925 | The effects of ferulic acid on nucleus pulposus cells under hydrogen peroxide-induced oxidative stress. 2011 , 46, 1670-1677 | 14 |
| 924 | The clinical impact of circulating caspase-3 p17 level: a potential new biomarker for myocardial injury and cardiovascular disease. 2011 , 7, 443-5 | 4 |
| 923 | Melatonin-mitochondria interplay in health and disease. 2011 , 11, 221-40 | 179 |
| 922 | PARP and RIP 1 are required for autophagy induced by 11'-deoxyverticillin A, which precedes caspase-dependent apoptosis. 2011 , 7, 598-612 | 102 |
| 921 | Perfluorooctane sulfonate induces apoptosis in N9 microglial cell line. 2011 , 30, 207-15 | 18 |
| 920 | Selenium-induced apoptosis-like cell death in Plasmodium falciparum. 2011 , 138, 1852-62 | 13 |
| 919 | Decreased expression level of apoptosis-related genes and/or proteins in skeletal muscles, but not in hearts, of growth hormone receptor knockout mice. 2011 , 236, 156-68 | 16 |
| 918 | Role of the DLL4-NOTCH system in PGF2alpha-induced luteolysis in the pregnant rat. 2011 , 84, 859-65 | 21 |
| 917 | Recovery of anoikis in Src-transformed cells and human breast carcinoma cells by restoration of the SIRP β /SHP-2 signaling system. 2011 , 71, 1229-34 | 5 |
| 916 | A GAG trinucleotide-repeat polymorphism in the gene for glutathione biosynthetic enzyme, GCLC, affects gene expression through translation. 2011 , 25, 2180-7 | 15 |
| 915 | Latex of Euphorbia antiquorum induces apoptosis in human cervical cancer cells via c-jun n-terminal kinase activation and reactive oxygen species production. 2011 , 63, 1339-47 | 15 |
| 914 | Renal pro-apoptotic proteins are reduced by growth hormone resistance but not by visceral fat removal. 2011 , 392, 475-81 | 5 |
| 913 | A novel synthetic 2-(3-methoxyphenyl)-6,7-methylenedioxyquinolin-4-one arrests the G2/M phase arrest via Cdc25c and induces apoptosis through caspase- and mitochondria-dependent pathways in TSGH8301 human bladder cancer cells. 2012 , 40, 731-8 | |
| 912 | Quercetin induces apoptosis in the methotrexate-resistant osteosarcoma cell line U2-OS/MTX300 via mitochondrial dysfunction and dephosphorylation of Akt. 2011 , 26, 687-93 | 15 |
| 911 | Estrogen-induced dimerization and activation of ER β -fused caspase-8: artificial reversal of the estrogenic hormone effect in carcinogenesis. 2011 , 11, 816-25 | 2 |
| 910 | CASP3 gene single-nucleotide polymorphism (rs72689236) and Kawasaki disease in Taiwanese children. 2011 , 56, 161-5 | 62 |
| 909 | The design and screening of drugs to prevent acquired sensorineural hearing loss. 2011 , 6, 491-505 | 47 |
| 908 | Loss of caspase-2-dependent apoptosis induces autophagy after mitochondrial oxidative stress in primary cultures of young adult cortical neurons. 2011 , 286, 8493-8506 | 55 |

| | | |
|-----|--|-----|
| 907 | Functional motor recovery from brain ischemic insult by carbon nanotube-mediated siRNA silencing. 2011 , 108, 10952-7 | 189 |
| 906 | Aqueous Extract of Shi-Liu-Wei-Liu-Qi-Yin Induces G2/M Phase Arrest and Apoptosis in Human Bladder Carcinoma Cells via Fas and Mitochondrial Pathway. 2011 , 2011, nep016 | 6 |
| 905 | Effects of the yangjing capsule extract on steroidogenesis and apoptosis in mouse leydig cells. 2012 , 2012, 985457 | 12 |
| 904 | Cardioprotective effect of paeonol and danshensu combination on isoproterenol-induced myocardial injury in rats. 2012 , 7, e48872 | 114 |
| 903 | 1-benzyl-2-phenylbenzimidazole (BPB), a benzimidazole derivative, induces cell apoptosis in human chondrosarcoma through intrinsic and extrinsic pathways. 2012 , 13, 16472-88 | 13 |
| 902 | Systematic evaluation of apoptotic pathway gene polymorphisms and lung cancer risk. 2012 , 33, 1699-706 | 20 |
| 901 | Ethyl gallate induces apoptosis of HL-60 cells by promoting the expression of caspases-8, -9, -3, apoptosis-inducing factor and endonuclease G. 2012 , 13, 11912-22 | 17 |
| 900 | Expression of B-crystallin overrides the anti-apoptotic activity of XIAP. 2012 , 14, 1332-45 | 13 |
| 899 | Downregulation of BCL2 by miRNAs augments drug-induced apoptosis--a combined computational and experimental approach. 2012 , 125, 1568-78 | 91 |
| 898 | Association between CASP8 and CASP10 polymorphisms and toxicity outcomes with platinum-based chemotherapy in Chinese patients with non-small cell lung cancer. 2012 , 17, 1551-61 | 16 |
| 897 | Conserved Domains, Residues, WebLogo and Active Sites of Caspase- Cascades Related to Apoptotic Signaling Pathway. 2012 , 7, 392-401 | |
| 896 | Radiation/paclitaxel treatment of p53-abnormal non-small cell lung cancer xenograft tumor and associated mechanism. 2012 , 27, 227-33 | 4 |
| 895 | The antiepileptic drug valproic acid restores T cell homeostasis and ameliorates pathogenesis of experimental autoimmune encephalomyelitis. 2012 , 287, 28656-65 | 35 |
| 894 | KHDC1A, a novel translational repressor, induces endoplasmic reticulum-dependent apoptosis. 2012 , 31, 1447-57 | 5 |
| 893 | Affirmative effects of iloprost on apoptosis during ischemia-reperfusion injury in kidney as a distant organ. 2012 , 34, 111-8 | 10 |
| 892 | A novel mouse model of podocyte depletion. 2012 , 121, e10-22 | 11 |
| 891 | Neuroscience. dSarm-ing axon degeneration. 2012 , 337, 418-9 | 3 |
| 890 | Combination treatment with photodynamic therapy and curcumin induces mitochondria-dependent apoptosis in AMC-HN3 cells. 2012 , 41, 2184-90 | 47 |

| | | |
|-----|--|----|
| 889 | Alpha-crystallins and tumorigenesis. 2012 , 12, 1164-73 | 19 |
| 888 | Molecular Mechanisms of Muscle Stem Cell Aging. 2012 , 100-111 | |
| 887 | Association of CASP7 polymorphisms and survival of patients with non-small cell lung cancer with platinum-based chemotherapy treatment. 2012 , 142, 680-689 | 8 |
| 886 | Synthesis of the reported structures for kealiinines B and C. 2012 , 14, 4734-7 | 34 |
| 885 | Cytotoxic effects of Echinacea purpurea flower extracts and cichoric acid on human colon cancer cells through induction of apoptosis. 2012 , 143, 914-9 | 49 |
| 884 | Conservation of hearing and protection of hair cells in cochlear implant patients' with residual hearing. 2012 , 295, 1909-27 | 46 |
| 883 | Molecular characterization of a cytokine-induced apoptosis inhibitor from Schistosoma japonicum. 2012 , 111, 2317-24 | 9 |
| 882 | Celastrol inhibits growth and induces apoptotic cell death in melanoma cells via the activation ROS-dependent mitochondrial pathway and the suppression of PI3K/AKT signaling. 2012 , 17, 1275-86 | 86 |
| 881 | Apoptotic responses of Carassius auratus lymphocytes to nodularin exposure in vitro. 2012 , 33, 1229-37 | 35 |
| 880 | Dental resin curing blue light induced oxidative stress with reactive oxygen species production. 2012 , 114, 73-8 | 19 |
| 879 | A mechanistic insight into caspase-7 inhibition by BIR1-2 domains of XIAP and cIAP1. 2012 , 9, 615-623 | 1 |
| 878 | Apoptosis-inducing effects of distichamine and narciprimine, rare alkaloids of the plant family Amaryllidaceae. 2012 , 22, 6195-9 | 50 |
| 877 | Scutellaria litwinowii induces apoptosis through both extrinsic and intrinsic apoptotic pathways in human promyelocytic leukemia cells. 2012 , 64, 80-8 | 12 |
| 876 | Macrophage recognition of thiol-group oxidized cells: recognition of carbohydrate chains by macrophage surface nucleolin as apoptotic cells. 2012 , 76, 2068-74 | |
| 875 | Ki-67 is a prognostic biomarker of survival after radiofrequency ablation of liver malignancies. 2012 , 19, 4262-9 | 48 |
| 874 | Protective effect of deferricoproten isolated from Monascus purpureus NTU 568 on citrinin-induced apoptosis in HEK-293 cells. 2012 , 60, 7880-5 | 9 |
| 873 | A mitochondria-mediated apoptotic pathway induced by deoxynivalenol in human colon cancer cells. 2012 , 26, 414-20 | 51 |
| 872 | Pseudolaric acid B induces apoptosis via proteasome-mediated Bcl-2 degradation in hormone-refractory prostate cancer DU145 cells. 2012 , 26, 595-602 | 29 |

| | | |
|-----|---|-----|
| 871 | Cell death induced by the Alternaria mycotoxin Alternariol. 2012 , 26, 915-23 | 35 |
| 870 | The effect of acrylamide and nitric oxide donors on human mesenchymal progenitor cells. 2012 , 26, 897-906 | 11 |
| 869 | Multi-walled carbon nanotubes induce apoptosis via mitochondrial pathway and scavenger receptor. 2012 , 26, 799-806 | 81 |
| 868 | Characterization of Chikungunya virus infection in human neuroblastoma SH-SY5Y cells: role of apoptosis in neuronal cell death. 2012 , 163, 563-72 | 40 |
| 867 | Targeting adipocyte apoptosis: a novel strategy for obesity therapy. 2012 , 417, 1-4 | 45 |
| 866 | Mono-2-ethylhexyl phthalate induced loss of mitochondrial membrane potential and activation of Caspase3 in HepG2 cells. 2012 , 33, 421-30 | 25 |
| 865 | Investigation of the component of Lycopodium serratum extract that inhibits proliferation and mediates apoptosis of human HL-60 leukemia cells. 2012 , 50, 2629-34 | 19 |
| 864 | Alantolactone induces activation of apoptosis in human hepatoma cells. 2012 , 50, 3313-9 | 48 |
| 863 | Apoptosis in the anucleate platelet. 2012 , 26, 51-63 | 153 |
| 862 | Clavulanic acid inhibits MPP ⁺ -induced ROS generation and subsequent loss of dopaminergic cells. 2012 , 1469, 129-35 | 21 |
| 861 | Scar-free wound healing and regeneration following tail loss in the leopard gecko, Eublepharis macularius. 2012 , 295, 1575-95 | 70 |
| 860 | Computational modeling of apoptotic signaling pathways induced by cisplatin. 2012 , 6, 122 | 24 |
| 859 | Apoptosis and Male Infertility. 2012 , 329-336 | 1 |
| 858 | Surface decoration of selenium nanoparticles by mushroom polysaccharidesβprotein complexes to achieve enhanced cellular uptake and antiproliferative activity. 2012 , 22, 9602 | 116 |
| 857 | Induction of Apoptosis in the Immature Mouse Testes by a Mixture of Melamine and Cyanuric Acid. 2012 , 11, 2058-2066 | 4 |
| 856 | Fatty acid synthase inhibitor orlistat induces apoptosis in T cell lymphoma: role of cell survival regulatory molecules. 2012 , 1820, 1764-73 | 34 |
| 855 | DEVDase activity is induced in potato leaves during Phytophthora infestans infection. 2012 , 61, 197-203 | 17 |
| 854 | Analysis of parameters associated with prevention of cellular apoptosis by pathogenic Neisseriae and purified porins. 2012 , 799, 319-41 | |

| | | |
|-----|--|-----|
| 853 | MiR-135a functions as a selective killer of malignant glioma. 2012 , 31, 3866-74 | 73 |
| 852 | Cascade imaging of proteolytic pathways in cancer cells using fluorescent protein-conjugated gold nanoquenchers. 2012 , 48, 10547-9 | 20 |
| 851 | The potential toxic effects of cerium on organism: cerium prolonged the developmental time and induced the expression of Hsp70 and apoptosis in <i>Drosophila melanogaster</i> . 2012 , 21, 2068-77 | 13 |
| 850 | Stevioside induced ROS-mediated apoptosis through mitochondrial pathway in human breast cancer cell line MCF-7. 2012 , 64, 1087-94 | 54 |
| 849 | <i>Neisseria meningitidis</i> . 2012 , | |
| 848 | Group VIB Phospholipase A(2) promotes proliferation of INS-1 insulinoma cells and attenuates lipid peroxidation and apoptosis induced by inflammatory cytokines and oxidant agents. 2012 , 2012, 989372 | 5 |
| 847 | Essential oil from <i>Cryptomeria japonica</i> induces apoptosis in human oral epidermoid carcinoma cells via mitochondrial stress and activation of caspases. 2012 , 17, 3890-901 | 15 |
| 846 | Oxidative stress induced cellular signaling in RPE cells. 2012 , S4, 392-411 | 45 |
| 845 | New Biomarkers in the Retina and RPE Under Oxidative Stress. 2012 , | 3 |
| 844 | Oxidative stress induced cellular signaling in RPE cells. 2012 , 4, 392-411 | 29 |
| 843 | Protective effect of apocynin on antimycin A-induced cell damage in osteoblastic MC3T3-E1 cells. 2012 , 32, 714-21 | 17 |
| 842 | Protective effect of luteolin in experimental ischemic stroke: upregulated SOD1, CAT, Bcl-2 and claudin-5, down-regulated MDA and Bax expression. 2012 , 37, 2014-24 | 60 |
| 841 | Redox regulation of mitochondrial function. 2012 , 16, 1323-67 | 352 |
| 840 | Effects of fluctuating glucose levels on neuronal cells in vitro. 2012 , 37, 1768-82 | 42 |
| 839 | Deletion of growth hormone receptor gene but not visceral fat removal decreases expression of apoptosis-related genes in the kidney-potential mechanism of lifespan extension. 2012 , 34, 295-304 | 6 |
| 838 | Association of TNF- α and Fas gene promoter polymorphism with the risk of Kashin-Beck disease in Northwest Chinese population. 2012 , 31, 1051-7 | 12 |
| 837 | C/EBP- β ameliorates CCl(4)-induced liver fibrosis in mice through promoting apoptosis of hepatic stellate cells with little apoptotic effect on hepatocytes in vitro and in vivo. 2012 , 17, 492-502 | 18 |
| 836 | Prevention of paraquat-induced apoptosis in human neuronal SH-SY5Y cells by lipocalin-type prostaglandin D synthase. 2012 , 120, 279-91 | 16 |

| | | |
|-----|---|-----|
| 835 | Synthesis and biological activity of 23-ethylidene-26-hydroxy-22-oxocholestane derivatives from spirostanic sapogenins. 2012 , 51, 67-78 | 5 |
| 834 | Identification of NME5 as a contributor to innate resistance to gemcitabine in pancreatic cancer cells. 2012 , 279, 1261-73 | 11 |
| 833 | Phospholipase C mediates cadmium-dependent apoptosis in HEK 293 cells. 2012 , 110, 510-7 | 16 |
| 832 | Glycogen synthase kinase-3 (GSK-3) inhibition induces apoptosis in leukemic cells through mitochondria-dependent pathway. 2012 , 36, 499-508 | 29 |
| 831 | The venom of the spider <i>Macrothele raveni</i> induces apoptosis in the myelogenous leukemia K562 cell line. 2012 , 36, 1063-6 | 23 |
| 830 | Molecular biology II: protein function. 2012 , 30, 169-173 | |
| 829 | Intercellular transfer of apoptotic signals via electrofusion. 2012 , 318, 896-903 | 1 |
| 828 | Association of CASP3 polymorphism with hematologic toxicity in patients with advanced non-small-cell lung carcinoma treated with platinum-based chemotherapy. 2012 , 103, 1451-9 | 20 |
| 827 | Andrographolide induces cell cycle arrest and apoptosis in human rheumatoid arthritis fibroblast-like synoviocytes. 2012 , 28, 47-56 | 37 |
| 826 | Effect of diallyl trisulfide derivatives on the induction of apoptosis in human prostate cancer PC-3 cells. 2012 , 363, 75-84 | 13 |
| 825 | Cinnamic acid induces apoptotic cell death and cytoskeleton disruption in human melanoma cells. 2013 , 32, 31 | 56 |
| 824 | Bcl-3 regulates UVB-induced apoptosis. 2013 , 26, 47-55 | 7 |
| 823 | Anti-tumor activity of <i>Swietenia mahagoni</i> (L.) Jacq. leaf extract against Ehrlich's ascites carcinoma in mice. 2013 , 13, 205-216 | 3 |
| 822 | Cytotoxic effect of gambogic acid on SH-SY5Y neuroblastoma cells is mediated by intrinsic caspase-dependent signaling pathway. 2013 , 377, 187-96 | 25 |
| 821 | Targeted delivery of nano-therapeutics for major disorders of the central nervous system. 2013 , 30, 2485-98 | 121 |
| 820 | Micellar delivery of flutamide via milk protein nanovehicles enhances its anti-tumor efficacy in androgen-dependent prostate cancer rat model. 2013 , 30, 2654-63 | 34 |
| 819 | Taurine 8. 2013 , | 1 |
| 818 | FITC-quencher based caspase 3-activatable nanoprobe for effectively sensing caspase 3 in vitro and in cells. 2013 , 5, 8963-7 | 25 |

| | | |
|-----|---|-----|
| 817 | Association between main Caspase gene polymorphisms and the susceptibility and prognosis of colorectal cancer. 2013 , 30, 565 | 16 |
| 816 | N-substituted 1,2-dihydroquinolines as anticancer agents: electronic control of redox stability, assessment of antiproliferative effects, and mechanistic insights. 2013 , 8, 1623-8 | 5 |
| 815 | A 35 kD Phyllanthus niruri protein modulates iron mediated oxidative impairment to hepatocytes via the inhibition of ERKs, p38 MAPKs and activation of PI3k/Akt pathway. 2013 , 56, 119-30 | 20 |
| 814 | Mitochondrial complex I inhibitors, acetogenins, induce HepG2 cell death through the induction of the complete apoptotic mitochondrial pathway. 2013 , 45, 153-64 | 29 |
| 813 | Oxidative damage and apoptosis induced by microcystin-LR in the liver of Rana nigromaculata in vivo. 2013 , 140-141, 11-8 | 40 |
| 812 | Ac-cel, a novel antioxidant, protects against hydrogen peroxide-induced injury in PC12 cells via attenuation of mitochondrial dysfunction. 2013 , 50, 453-61 | 12 |
| 811 | Ki 67 is an independent predictive biomarker of cancer specific and local recurrence-free survival after lung tumor ablation. 2013 , 20 Suppl 3, S676-83 | 29 |
| 810 | Proteasome inhibitor MG132 enhances TRAIL-induced apoptosis and inhibits invasion of human osteosarcoma OS732 cells. 2013 , 439, 179-86 | 16 |
| 809 | Replacement of a quinone by a 5-O-acetylhydroquinone abolishes the accidental necrosis inducing effect while preserving the apoptosis-inducing effect of renieramycin M on lung cancer cells. 2013 , 76, 1468-74 | 6 |
| 808 | The impact of chemical synovectomy with sodium morrhuate on human chondrocytes and cartilage in vitro. 2013 , 33, 1201-6 | 2 |
| 807 | Window current through the T-type Ca ²⁺ channel triggers the mechanism for cellular apoptosis via mitochondrial pathways. 2013 , 28, 658-66 | 4 |
| 806 | The changing dielectric properties of CHO cells can be used to determine early apoptotic events in a bioprocess. 2013 , 110, 2902-14 | 40 |
| 805 | Nanosecond pulsed electric fields induce poly(ADP-ribose) formation and non-apoptotic cell death in HeLa S3 cells. 2013 , 438, 557-62 | 27 |
| 804 | Ionically-crosslinked milk protein nanoparticles as flutamide carriers for effective anticancer activity in prostate cancer-bearing rats. 2013 , 85, 444-51 | 43 |
| 803 | Highly sensitive detection of caspase-3 activities via a nonconjugated gold nanoparticle-quantum dot pair mediated by an inner-filter effect. 2013 , 5, 9798-802 | 75 |
| 802 | Induction of apoptosis through caspase-independent or caspase-9-dependent pathway in mouse and human osteosarcoma cells by a new nitroxyl spin-labeled derivative of podophyllotoxin. 2013 , 18, 727-38 | 22 |
| 801 | Fucoidan derived from Undaria pinnatifida induces apoptosis in human hepatocellular carcinoma SMMC-7721 cells via the ROS-mediated mitochondrial pathway. 2013 , 11, 1961-76 | 110 |
| 800 | Proteases: Structure and Function. 2013 , | 25 |

| | | |
|-----|--|-----------------|
| 799 | Decreased levels of proapoptotic factors and increased key regulators of mitochondrial biogenesis constitute new potential beneficial features of long-lived growth hormone receptor gene-disrupted mice. 2013 , 68, 639-51 | 10 |
| 798 | Daidzein causes cytochrome c-mediated apoptosis via the Bcl-2 family in human hepatic cancer cells. 2013 , 60, 542-9 | 52 |
| 797 | Triterpenoid resinous metabolites from the genus <i>Boswellia</i> : pharmacological activities and potential species-identifying properties. 2013 , 7, 153 | 26 |
| 796 | Modeling heterogeneous responsiveness of intrinsic apoptosis pathway. 2013 , 7, 65 | 17 |
| 795 | PQ1, a quinoline derivative, induces apoptosis in T47D breast cancer cells through activation of caspase-8 and caspase-9. 2013 , 18, 1071-82 | 26 |
| 794 | Potential therapeutic role of Tridham in human hepatocellular carcinoma cell line through induction of p53 independent apoptosis. 2013 , 13, 323 | 10 |
| 793 | The role of Sep (O-phosphoserine) tRNA: Sec (selenocysteine) synthase (SEPSECS) in proliferation, apoptosis and hormone secretion of trophoblast cells. 2013 , 34, 967-72 | 2 |
| 792 | Protective effects of aliskiren on ischemia-reperfusion-induced renal injury in rats. 2013 , 718, 160-6 | 39 |
| 791 | Down-regulation of miR-21 biogenesis by estrogen action contributes to osteoclastic apoptosis. 2013 , 114, 1217-22 | 76 |
| 790 | Apoptosis in temporomandibular joint disc with internal derangement involves mitochondrial-dependent pathways. An in vivo study. 2013 , 71, 577-83 | 21 |
| 789 | Intrinsic role of FoxO3a in the development of CD8+ T cell memory. 2013 , 190, 1066-75 | 22 |
| 788 | DNA damage-induced cell death: from specific DNA lesions to the DNA damage response and apoptosis. 2013 , 332, 237-48 | 57 ¹ |
| 787 | Polysaccharides of <i>Dendrobium officinale</i> inhibit TNF- α -induced apoptosis in A-253 cell line. 2013 , 62, 313-24 | 27 |
| 786 | Changes in the messenger RNA expression levels of Bcl-2 family members and caspase-8 and -3 in porcine ovarian follicles during follicular atresia. 2013 , 84, 222-30 | 7 |
| 785 | Apoptosis in Down's syndrome: lessons from studies of human and mouse models. 2013 , 18, 121-34 | 16 |
| 784 | Protective effects of ADAM8 against cisplatin-mediated apoptosis in non-small-cell lung cancer. 2013 , 37, 47-53 | 13 |
| 783 | Resistin protects against 6-hydroxydopamine-induced cell death in dopaminergic-like MES23.5 cells. 2013 , 228, 563-71 | 29 |
| 782 | A small-molecule induces apoptosis and suppresses metastasis in pancreatic cancer cells. 2013 , 48, 658-67 | 8 |

| | | |
|-----|--|-----|
| 781 | Lethal synergism between organic and inorganic wood preservatives via formation of an unusual lipophilic ternary complex. 2013 , 266, 335-44 | 19 |
| 780 | Dietary Chlorella protects against heterocyclic amine-induced aberrant gene expression in the rat colon by increasing fecal excretion of unmetabolized PhIP. 2013 , 56, 272-7 | 4 |
| 779 | Modeling, synthesis, and biological evaluation of potential retinoid X receptor (RXR) selective agonists: novel analogues of 4-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethynyl]benzoic acid (bexarotene) and (E)-3-(3-(1,2,3,4-tetrahydro-1,1,4,4,6-pentamethylnaphthalen-7-yl)-4-hydroxyphenyl)acrylic acid | 17 |
| 778 | Radiation-inducible protein RbAp48 contributes to radiosensitivity of cervical cancer cells. 2013 , 130, 601-8 | 14 |
| 777 | Synthesis and antiproliferative activity of novel steroidal dendrimer conjugates. 2013 , 78, 1254-62 | 2 |
| 776 | Inhibition of tumor growth in vitro and in vivo by fucoxanthin against melanoma B16F10 cells. 2013 , 35, 39-46 | 78 |
| 775 | Calyxin Y induces hydrogen peroxide-dependent autophagy and apoptosis via JNK activation in human non-small cell lung cancer NCI-H460 cells. 2013 , 340, 51-62 | 62 |
| 774 | Corosolic acid induces apoptotic cell death in human lung adenocarcinoma A549 cells in vitro. 2013 , 56, 8-17 | 28 |
| 773 | Association of CASP9, CASP10 gene polymorphisms and tea drinking with colorectal cancer risk in the Han Chinese population. 2013 , 14, 47-57 | 5 |
| 772 | Design, synthesis and biological evaluation of cinnamic acyl shikonin derivatives. 2013 , 81, 275-83 | 24 |
| 771 | Prima-1 induces apoptosis in bladder cancer cell lines by activating p53. 2013 , 68, 297-303 | 12 |
| 770 | Effects of baicalein on apoptosis, cell cycle arrest, migration and invasion of osteosarcoma cells. 2013 , 53, 325-33 | 45 |
| 769 | Alternative germ cell death pathway in Drosophila involves HtrA2/Omi, lysosomes, and a caspase-9 counterpart. 2013 , 25, 29-42 | 67 |
| 768 | Protective effects of farrerol against hydrogen-peroxide-induced apoptosis in human endothelium-derived EA.hy926 cells. 2013 , 91, 733-40 | 26 |
| 767 | Design and evaluation of new chemotherapeutics of aloe-emodin (AE) against the deadly cancer disease: an in silico study. 2013 , 6, 141-53 | 3 |
| 766 | Gallic acid: molecular rival of cancer. 2013 , 35, 473-85 | 196 |
| 765 | A coupled protein and probe engineering approach for selective inhibition and activity-based probe labeling of the caspases. 2013 , 135, 9130-8 | 28 |
| 764 | Mechanism for hepato-protective action of Liangxue Huayu Recipe (LHR): blockade of mitochondrial cytochrome c release and caspase activation. 2013 , 148, 851-60 | 11 |

| | | |
|-----|---|-----|
| 763 | Hexane extract from <i>Polygonum multiflorum</i> attenuates glutamate-induced apoptosis in primary cultured cortical neurons. 2013 , 145, 261-8 | 28 |
| 762 | Diethylthiocarbamate induces apoptosis in neuroblastoma cells by raising the intracellular copper level, triggering cytochrome c release and caspase activation. 2013 , 27, 349-57 | 25 |
| 761 | External Qi of Yan Xin Qigong inhibits activation of Akt, Erk1/2 and NF- κ B and induces cell cycle arrest and apoptosis in colorectal cancer cells. 2013 , 31, 113-22 | 18 |
| 760 | Cytotoxic and apoptotic effects of chalcone derivatives of 2-acetyl thiophene on human colon adenocarcinoma cells. 2013 , 31, 289-97 | 31 |
| 759 | Sinomenine hydrochloride inhibits human hepatocellular carcinoma cell growth in vitro and in vivo: involvement of cell cycle arrest and apoptosis induction. 2013 , 42, 229-38 | 44 |
| 758 | Effect of N-acetyl cysteine on enterocyte apoptosis and intracellular signalling pathways' response to oxidative stress in weaned piglets. 2013 , 110, 1938-47 | 34 |
| 757 | Coenzyme Q10 rescues ethanol-induced corneal fibroblast apoptosis through the inhibition of caspase-2 activation. 2013 , 288, 11689-704 | 14 |
| 756 | Insulin deprivation decreases caspase-dependent apoptotic signaling in cultured rat sertoli cells. 2013 , 2013, 970370 | 21 |
| 755 | Destruxin B Isolated from Entomopathogenic Fungus <i>Metarhizium anisopliae</i> Induces Apoptosis via a Bcl-2 Family-Dependent Mitochondrial Pathway in Human Nonsmall Cell Lung Cancer Cells. 2013 , 2013, 548929 | 16 |
| 754 | 6-C-methyl flavonoids isolated from <i>Pinus densata</i> inhibit the proliferation and promote the apoptosis of the HL-60 human promyelocytic leukaemia cell line. 2013 , 79, 1024-30 | 10 |
| 753 | Nucleotide excision repair diseases. 2013 , 10, 49-57 | |
| 752 | Tat-SmacN7 induces radiosensitization in cancer cells through the activation of caspases and induction of apoptosis. 2013 , 42, 985-92 | 10 |
| 751 | Antineoplastic effects of deoxyelephantopin, a sesquiterpene lactone from <i>Elephantopus scaber</i> , on lung adenocarcinoma (A549) cells. 2013 , 11, 269-77 | 30 |
| 750 | Cadmium-induced apoptosis in primary rat cerebral cortical neurons culture is mediated by a calcium signaling pathway. 2013 , 8, e64330 | 110 |
| 749 | Effects of aging and exercise training on apoptosis in the heart. 2013 , 9, 212-9 | 54 |
| 748 | Novel phosphorylation and ubiquitination sites regulate reactive oxygen species-dependent degradation of anti-apoptotic c-FLIP protein. 2013 , 288, 12777-90 | 45 |
| 747 | OSU-03012, a non-Cox inhibiting celecoxib derivative, induces apoptosis of human esophageal carcinoma cells through a p53/Bax/cytochrome c/caspase-9-dependent pathway. 2013 , 24, 690-8 | 11 |
| 746 | Mitochondrial dysfunction is the focus of quaternary ammonium surfactant toxicity to mammalian epithelial cells. 2013 , 57, 2631-9 | 54 |

| | | |
|-----|---|----|
| 745 | Apoptosis occurs throughout the diseased rotator cuff. 2013 , 41, 2249-55 | 32 |
| 744 | New types of metacaspases in phytoplankton reveal diverse origins of cell death proteases. 2013 , 4, e490 | 74 |
| 743 | Alantolactone induces apoptosis in RKO cells through the generation of reactive oxygen species and the mitochondrial pathway. 2013 , 8, 967-72 | 34 |
| 742 | Newcastle disease virus Malaysian strain AF2240 induces apoptosis in MCF-7 human breast carcinoma cells at an early stage of the virus life cycle. 2013 , 31, 525-32 | 12 |
| 741 | Antiproliferative activity of <i>Alpinia officinarum</i> extract in the human breast cancer cell line MCF-7. 2013 , 7, 1288-92 | 13 |
| 740 | Induction of apoptosis in infantile hemangioma endothelial cells by propranolol. 2013 , 6, 574-578 | 26 |
| 739 | Methotrexate induces apoptosis in nasal polyps via caspase cascades and both mitochondria-mediated and p38 mitogen-activated protein kinases/Jun N-terminal kinase pathways. 2013 , 27, e26-31 | 10 |
| 738 | Active extracts of black tea (<i>Camellia Sinensis</i>) induce apoptosis of PC-3 prostate cancer cells via mitochondrial dysfunction. 2013 , 30, 763-72 | 22 |
| 737 | Terrein induces apoptosis in HeLa human cervical carcinoma cells through p53 and ERK regulation. 2013 , 29, 1600-8 | 25 |
| 736 | RNA interference-mediated FANCF silencing sensitizes OVCAR3 ovarian cancer cells to adriamycin through increased adriamycin-induced apoptosis dependent on JNK activation. 2013 , 29, 1721-9 | 8 |
| 735 | Picosecond pulsed electric fields induce apoptosis in HeLa cells via the endoplasmic reticulum stress and caspase-dependent signaling pathways. 2013 , 42, 963-70 | 9 |
| 734 | Photodynamic therapy in combination with talaporfin sodium induces mitochondrial apoptotic cell death accompanied with necrosis in glioma cells. 2013 , 36, 215-21 | 30 |
| 733 | Association between CASP-8 gene polymorphisms and cancer risk in some Asian population based on a HuGE review and meta-analysis. 2013 , 12, 6466-76 | 7 |
| 732 | Apoptotic Effects of <i>Melandryum firmum</i> Root Extracts in Human SH-SY5Y Neuroblastoma Cells. 2013 , 22, 208-13 | 10 |
| 731 | Apoptosis and Activation-Induced Cell Death. 2013 , | |
| 730 | Gene expression study related with the intrinsic pathway of apoptosis in bladder cancer by real-time PCR technique. 2013 , 12, 878-86 | 1 |
| 729 | Effect of quercetin on apoptosis of PANC-1 cells. 2013 , 85, 249-60 | 19 |
| 728 | Caspase-3 is involved in the signalling in erythroid differentiation by targeting late progenitors. 2013 , 8, e62303 | 21 |

| | | |
|-----|---|----|
| 727 | A novel benzothiazole derivative YLT322 induces apoptosis via the mitochondrial apoptosis pathway in vitro with anti-tumor activity in solid malignancies. 2013 , 8, e63900 | 12 |
| 726 | Spiclomazine induces apoptosis associated with the suppression of cell viability, migration and invasion in pancreatic carcinoma cells. 2013 , 8, e66362 | 13 |
| 725 | Silybin-mediated inhibition of Notch signaling exerts antitumor activity in human hepatocellular carcinoma cells. 2013 , 8, e83699 | 43 |
| 724 | PF2401-SF, standardized fraction of <i>Salvia miltiorrhiza</i> , induces apoptosis of activated hepatic stellate cells in vitro and in vivo. 2013 , 18, 2122-34 | 10 |
| 723 | Neuroprotective effects of hesperidin, a plant flavanone, on rotenone-induced oxidative stress and apoptosis in a cellular model for Parkinson's disease. 2013 , 2013, 102741 | 93 |
| 722 | HuGE systematic review and meta-analysis demonstrate association of CASP-3 and CASP-7 genetic polymorphisms with cancer risk. 2013 , 12, 1561-73 | 15 |
| 721 | Apoptosis: the intrinsic pathway. 367-377 | |
| 720 | Inhibition of c-Jun N-terminal kinase (JNK) suppresses porcine oocyte ageing in vitro. 2013 , 58, 535-545 | 6 |
| 719 | Role of Reactive Oxygen Species in Cell Death Pathways. 2013 , 33, 77 | 12 |
| 718 | Cerebrolysin protects against rotenone-induced oxidative stress and neurodegeneration. 2014 , 47 | 2 |
| 717 | Development of a curved, stratified, in vitro model to assess ocular biocompatibility. 2014 , 9, e96448 | 30 |
| 716 | Abieslactone induces cell cycle arrest and apoptosis in human hepatocellular carcinomas through the mitochondrial pathway and the generation of reactive oxygen species. 2014 , 9, e115151 | 19 |
| 715 | Tanshinone IIA induces apoptosis in human oral cancer KB cells through a mitochondria-dependent pathway. 2014 , 2014, 540516 | 17 |
| 714 | 4-Hydroxy-2-nonenal induces apoptosis by inhibiting AKT signaling in human osteosarcoma cells. 2014 , 2014, 873525 | 17 |
| 713 | Anti-carcinogenic effects of non-polar components containing licochalcone A in roasted licorice root. 2014 , 8, 257-66 | 20 |
| 712 | Molecular Mechanisms of Muscle Stem Cell Aging. 2014 , 25-39 | |
| 711 | Crinane Alkaloids of the Amaryllidaceae with Cytotoxic Effects in Human Cervical Adenocarcinoma (HeLa) Cells. 2014 , 9, 1934578X1400900 | 5 |
| 710 | Antioxidant activity and hepatoprotective effect of <i>Schizandra chinensis</i> Baill. Extracts containing active components in alcohol-induced HepG2 cells. 2014 , 23, 1615-1621 | 5 |

| | | |
|-----|---|----|
| 709 | Neuroprotective effects of melittin on hydrogen peroxide-induced apoptotic cell death in neuroblastoma SH-SY5Y cells. 2014 , 14, 286 | 28 |
| 708 | The role of TGF- β signaling and apoptosis in innate and adaptive immunity in zebrafish: a systems biology approach. 2014 , 8, 116 | 9 |
| 707 | TolC-dependent modulation of host cell death by the Francisella tularensis live vaccine strain. 2014 , 82, 2068-78 | 19 |
| 706 | Regeneration in the mammalian inner ear: A glimpse into the future. 2014 , 12, 1-5 | 2 |
| 705 | Expression of Fas (CD95/APO-1) and Fas ligand (FasL) in experimentally-induced acute pancreatitis. 2014 , 27, 65-72 | 2 |
| 704 | Apoptosis Induction by the Total Flavonoids from Arachniodes exilis in HepG2 Cells through Reactive Oxygen Species-Mediated Mitochondrial Dysfunction Involving MAPK Activation. 2014 , 2014, 906941 | 14 |
| 703 | Hyaluronan synthase 2 protects skin fibroblasts against apoptosis induced by environmental stress. 2014 , 289, 32253-32265 | 37 |
| 702 | Ginsenoside-Rb3 protects the myocardium from ischemia-reperfusion injury via the inhibition of apoptosis in rats. 2014 , 8, 1751-1756 | 19 |
| 701 | Induction of Apoptosis by Methyl Alcohol Extract of Enteromorpha linza (Linnaeus) J Agardh in U937 Human Leukemia Cells. 2014 , 13, 881 | 1 |
| 700 | Tangeretin, a citrus polymethoxyflavonoid, induces apoptosis of human gastric cancer AGS cells through extrinsic and intrinsic signaling pathways. 2014 , 31, 1788-94 | 52 |
| 699 | OMA1 mediates OPA1 proteolysis and mitochondrial fragmentation in experimental models of ischemic kidney injury. 2014 , 306, F1318-26 | 72 |
| 698 | Carboxylation of multiwalled carbon nanotube enhanced its biocompatibility with L02 cells through decreased activation of mitochondrial apoptotic pathway. 2014 , 102, 665-73 | 54 |
| 697 | Lactate down-regulates matrix synthesis and promotes apoptosis and autophagy in rat nucleus pulposus cells. 2014 , 32, 253-61 | 22 |
| 696 | Vitamin C suppresses cell death in MCF-7 human breast cancer cells induced by tamoxifen. 2014 , 18, 305-13 | 45 |
| 695 | Resistance of hematopoietic progenitors to Fas-mediated apoptosis is actively sustained by NFB with a characteristic transcriptional signature. 2014 , 23, 676-86 | 11 |
| 694 | A cancer-targeted nanosystem for delivery of gold(III) complexes: enhanced selectivity and apoptosis-inducing efficacy of a gold(III) porphyrin complex. 2014 , 53, 12532-6 | 37 |
| 693 | Detection of cell apoptosis in pelvic lymph nodes of patients with cervical cancer after neoadjuvant chemotherapy. 2014 , 42, 641-50 | 6 |
| 692 | The extracts of Holotrichia diomphalia larvae inhibit proliferation and induce apoptosis of cancer cells in vitro and in vivo. 2014 , 10, 251-259 | 3 |

- 691 Methyl protodioscin induces G2/M cell cycle arrest and apoptosis in A549 human lung cancer cells. **2014**, 10, 318-24 13
- 690 . **2014**, 5,
- 689 Structure determination of human Fas apoptosis inhibitory molecule and identification of the critical residues linking the interdomain interaction to the anti-apoptotic activity. **2014**, 70, 1812-22 5
- 688 Caspase-3 and RasGAP: a stress-sensing survival/demise switch. **2014**, 24, 83-9 30
- 687 Panax ginseng polysaccharide induces apoptosis by targeting Twist/AKR1C2/NF-1 pathway in human gastric cancer. **2014**, 102, 103-9 47
- 686 Gene expression of pro- and anti-apoptotic proteins in rock bream (*Oplegnathus fasciatus*) infected with megalocytivirus (family Iridoviridae). **2014**, 37, 122-30 35
- 685 Hydroxylation of multi-walled carbon nanotubes reduces their cytotoxicity by limiting the activation of mitochondrial mediated apoptotic pathway. **2014**, 25, 1033-44 17
- 684 Green tea catechins: a fresh flavor to anticancer therapy. **2014**, 19, 1-18 46
- 683 Piperine induces apoptosis of lung cancer A549 cells via p53-dependent mitochondrial signaling pathway. **2014**, 35, 3305-10 49
- 682 Oxymatrine induces mitochondria dependent apoptosis in human osteosarcoma MNNG/HOS cells through inhibition of PI3K/Akt pathway. **2014**, 35, 1619-25 47
- 681 Platycodin D, a triterpenoid saponin from *Platycodon grandiflorum*, induces G2/M arrest and apoptosis in human hepatoma HepG2 cells by modulating the PI3K/Akt pathway. **2014**, 35, 1267-74 39
- 680 SCP, a polysaccharide from *Schisandra chinensis*, induces apoptosis in human renal cell carcinoma Caki-1 cells through mitochondrial-dependent pathway via inhibition of ERK activation. **2014**, 35, 5369-74 10
- 679 PI3K/Akt pathway involving into apoptosis and invasion in human colon cancer cells LoVo. **2014**, 41, 3359-67 35
- 678 High dietary taurine inhibits myocardial apoptosis during an atherogenic diet: association with increased myocardial HSP70 and HSF-1 but not caspase 3. **2014**, 53, 929-37 10
- 677 Sulphation can enhance the antioxidant activity of polysaccharides produced by *Enterobacter cloacae* Z0206. **2014**, 99, 624-9 32
- 676 Involvement of apoptosis and autophagy in the death of RPMI 8226 multiple myeloma cells by two enantiomeric sigma receptor ligands. **2014**, 22, 221-33 11
- 675 Cytotoxic and apoptogenic effect of *Swietenia mahagoni* (L.) Jacq. leaf extract in human leukemic cell lines U937, K562 and HL-60. **2014**, 37, 234-47 8
- 674 Inhibition of cellular proliferation and induction of apoptosis in human lung adenocarcinoma A549 cells by T-type calcium channel antagonist. **2014**, 24, 1565-70 26

| | | |
|-----|---|-----|
| 673 | Shikonin targets cytosolic thioredoxin reductase to induce ROS-mediated apoptosis in human promyelocytic leukemia HL-60 cells. 2014 , 70, 182-93 | 135 |
| 672 | Gambogic acid induces apoptosis in hepatocellular carcinoma SMMC-7721 cells by targeting cytosolic thioredoxin reductase. 2014 , 69, 15-25 | 91 |
| 671 | Cancer-Targeted Monodisperse Mesoporous Silica Nanoparticles as Carrier of Ruthenium Polypyridyl Complexes to Enhance Theranostic Effects. 2014 , 24, 2754-2763 | 140 |
| 670 | Apoptotic anticancer activity of a novel fatty alcohol ester isolated from cultured marine diatom, <i>Phaeodactylum tricornutum</i> . 2014 , 6, 231-240 | 44 |
| 669 | Resuscitation. 2014 , | |
| 668 | Cell Death. 2014 , | 6 |
| 667 | pERK 1/2 inhibit Caspase-8 induced apoptosis in cancer cells by phosphorylating it in a cell cycle specific manner. 2014 , 8, 232-49 | 29 |
| 666 | Role of Protocatechuic Acid in Obesity-Related Pathologies. 2014 , 177-189 | 2 |
| 665 | Concomitant treatment with temozolomide enhances apoptotic cell death in glioma cells induced by photodynamic therapy with talaporfin sodium. 2014 , 11, 556-64 | 4 |
| 664 | Mitochondrion-mediated apoptosis is involved in reproductive damage caused by BPA in male rats. 2014 , 38, 1025-33 | 51 |
| 663 | Computational analysis of 3'UTR region of CASP3 with respect to miRSNPs and SNPs in targetting miRNAs. 2014 , 53PB, 235-241 | 5 |
| 662 | Induction of apoptosis by <i>Dioscorea nipponica</i> Makino extracts in human SH-SY5Y neuroblastoma cells via mitochondria-mediated pathway. 2014 , 18, 41-51 | 8 |
| 661 | Effect of N-acetylcysteine on β -radiation-induced cytotoxicity in human hepatocellular carcinoma cells. 2014 , 4, 317-321 | 1 |
| 660 | Poly β -cyclodextrin/TPdye nanomicelle-based two-photon nanoprobe for caspase-3 activation imaging in live cells and tissues. 2014 , 86, 11440-50 | 37 |
| 659 | NG as a novel nitric oxide donor induces apoptosis by increasing reactive oxygen species and inhibiting mitochondrial function in MGC803 cells. 2014 , 23, 27-36 | 11 |
| 658 | In vitro effects of differentially shaped hydroxyapatite microparticles on RAW264.7 cell responses. 2014 , 4, 28615-28622 | 6 |
| 657 | G226, a novel epipolythiodioxopiperazine derivative, induces autophagy and caspase-dependent apoptosis in human breast cancer cells in vitro. 2014 , 35, 1055-64 | 14 |
| 656 | Cardiac diastolic dysfunction in high-fat diet fed mice is associated with lipotoxicity without impairment of cardiac energetics in vivo. 2014 , 1842, 1525-37 | 42 |

| | | |
|-----|--|-----|
| 655 | Synthesis and biological evaluation of novel shikonin ester derivatives as potential anti-cancer agents. 2014 , 4, 35588 | 17 |
| 654 | Chemical glycosylation of cytochrome c improves physical and chemical protein stability. 2014 , 15, 16 | 20 |
| 653 | A miniaturized device for bioluminescence analysis of caspase-3/7 activity in a single apoptotic cell. 2014 , 406, 5389-94 | 7 |
| 652 | Reactive oxygen species in normal and tumor stem cells. 2014 , 122, 1-67 | 209 |
| 651 | Protective effects of 2',4'-dihydroxy-6'-methoxy-3',5'-dimethylchalcone against hydrogen peroxide-induced oxidative stress in hepatic L02 cell. 2014 , 37, 1211-8 | 9 |
| 650 | Association of caspase9 promoter polymorphisms with the susceptibility of AML in south Indian subjects. 2014 , 35, 8813-22 | 8 |
| 649 | Fenofibrate induces apoptosis of triple-negative breast cancer cells via activation of NF- κ B pathway. 2014 , 14, 96 | 44 |
| 648 | Ginsenoside compound K induces apoptosis in nasopharyngeal carcinoma cells via activation of apoptosis-inducing factor. 2014 , 9, 11 | 25 |
| 647 | Isodeoxyelephantopin from <i>Elephantopus scaber</i> (Didancao) induces cell cycle arrest and caspase-3-mediated apoptosis in breast carcinoma T47D cells and lung carcinoma A549 cells. 2014 , 9, 14 | 12 |
| 646 | Cerium oxide nanoparticles prevent apoptosis in primary cortical culture by stabilizing mitochondrial membrane potential. 2014 , 48, 784-93 | 36 |
| 645 | Bornyl caffeate induces apoptosis in human breast cancer MCF-7 cells via the ROS- and JNK-mediated pathways. 2014 , 35, 113-23 | 24 |
| 644 | Endoplasmic reticulum stress induced by zinc oxide nanoparticles is an earlier biomarker for nanotoxicological evaluation. 2014 , 8, 2562-74 | 185 |
| 643 | Protective effect of tormentic acid from <i>Potentilla chinensis</i> against lipopolysaccharide/D-galactosamine induced fulminant hepatic failure in mice. 2014 , 19, 365-72 | 46 |
| 642 | The apoptotic pathways effect of fine particulate from cooking oil fumes in primary fetal alveolar type II epithelial cells. 2014 , 761, 35-43 | 15 |
| 641 | Diallyl trisulfide-induced apoptosis of bladder cancer cells is caspase-dependent and regulated by PI3K/Akt and JNK pathways. 2014 , 37, 74-83 | 42 |
| 640 | βMangostin-induced apoptosis is mediated by estrogen receptor β in human breast cancer cells. 2014 , 66, 158-65 | 29 |
| 639 | Dithiaarsanes induce oxidative stress-mediated apoptosis in HL-60 cells by selectively targeting thioredoxin reductase. 2014 , 57, 5203-11 | 94 |
| 638 | Histone deacetylase inhibitors and cell death. 2014 , 71, 3885-901 | 130 |

| | | |
|-----|--|----|
| 637 | Acidic polysaccharide of Panax ginseng regulates the mitochondria/caspase-dependent apoptotic pathway in radiation-induced damage to the jejunum in mice. 2014 , 116, 514-21 | 23 |
| 636 | Different involvement of extracellular calcium in two modes of cell death induced by nanosecond pulsed electric fields. 2014 , 555-556, 47-54 | 39 |
| 635 | Protective effect of captopril against clozapine-induced myocarditis in rats: role of oxidative stress, proinflammatory cytokines and DNA damage. 2014 , 216, 43-52 | 28 |
| 634 | Apoptotic activities of the extract from Moringa oleifera leaves on human HCT116 colon cancer cells. 2014 , 1, 143-149 | 3 |
| 633 | AT-406, an IAP inhibitor, activates apoptosis and induces radiosensitization of normoxic and hypoxic cervical cancer cells. 2014 , 126, 56-65 | 8 |
| 632 | ROS-mediated JNK/p38-MAPK activation regulates Bax translocation in Sorafenib-induced apoptosis of EBV-transformed B cells. 2014 , 44, 977-85 | 57 |
| 631 | KLF5 promotes hypoxia-induced survival and inhibits apoptosis in non-small cell lung cancer cells via HIF-1 β . 2014 , 45, 1507-14 | 40 |
| 630 | Isoegomaketone induces apoptosis in SK-MEL-2 human melanoma cells through mitochondrial apoptotic pathway via activating the PI3K/Akt pathway. 2014 , 45, 1969-76 | 8 |
| 629 | The ER stress inducer DMC enhances TRAIL-induced apoptosis in glioblastoma. 2014 , 3, 495 | 12 |
| 628 | Anti-apoptotic effect of caspase inhibitors on H ₂ O ₂ -treated HeLa cells through early suppression of its oxidative stress. 2014 , 31, 2413-21 | 17 |
| 627 | A Cancer-Targeted Nanosystem for Delivery of Gold(III) Complexes: Enhanced Selectivity and Apoptosis-Inducing Efficacy of a Gold(III) Porphyrin Complex. 2014 , 126, 12740-12744 | 14 |
| 626 | Tanshinone IIA induces cytochrome c-mediated caspase cascade apoptosis in A549 human lung cancer cells via the JNK pathway. 2014 , 45, 683-90 | 38 |
| 625 | Anti-tumoral effects of a trypsin inhibitor derived from buckwheat in vitro and in vivo. 2015 , 12, 1777-82 | 19 |
| 624 | Fucoidan inhibits proliferation of the SKM-1 acute myeloid leukaemia cell line via the activation of apoptotic pathways and production of reactive oxygen species. 2015 , 12, 6649-55 | 32 |
| 623 | Para-phenylenediamine-induces apoptosis via a pathway dependent on PTK-Ras-Raf-JNK activation but independent of the PI3K/Akt pathway in NRK-52E cells. 2015 , 11, 2262-8 | 3 |
| 622 | Combination of cytokinin and auxin induces apoptosis, cell cycle progression arrest and blockage of the Akt pathway in HeLa cells. 2015 , 12, 719-27 | 5 |
| 621 | Protective effect of carboxymethylated chitosan on hydrogen peroxide-induced apoptosis in nucleus pulposus cells. 2015 , 11, 1629-38 | 12 |
| 620 | Gap junction enhances phototoxicity of photodynamic therapy agent 2-[1-hexyloxyethyl]-2-devinylpyropheophorbide-a (HPPH). 2015 , 47, 68-76 | 5 |

| | | |
|-----|---|------|
| 619 | Induction of atypical cell death in thyroid carcinoma cells by the indirubin derivative 7-bromoindirubin-3'-oxime (7BIO). 2015 , 15, 97 | 6 |
| 618 | A mathematical model for apoptotic switch in <i>Drosophila</i> . 2015 , 12, 056003 | 1 |
| 617 | Cecropin-P17, an analog of Cecropin B, inhibits human hepatocellular carcinoma cell HepG-2 proliferation via regulation of ROS, Caspase, Bax, and Bcl-2. 2015 , 21, 661-8 | 11 |
| 616 | Anticancer activity of <i>Bombyx batryticatus</i> ethanol extract against the human tumor cell line HeLa. 2015 , 14, 79-88 | 9 |
| 615 | Constitutive Activation of Caspase-3 in Non-Apoptotic Oral Squamous Cell Carcinoma Cells. 2015 , 07, | 1 |
| 614 | Modulation of the PI3K/Akt Pathway and Bcl-2 Family Proteins Involved in Chicken's Tubular Apoptosis Induced by Nickel Chloride (NiCl ₂). 2015 , 16, 22989-3011 | 31 |
| 613 | Protective Effect of 2,4',5'-Trihydroxyl-5,2'-dibromo diphenylmethanone, a New Halophenol, against Hydrogen Peroxide-Induced EA.hy926 Cells Injury. 2015 , 20, 14254-64 | 7 |
| 612 | Fluorescent proteins as genetically encoded FRET biosensors in life sciences. 2015 , 15, 26281-314 | 121 |
| 611 | Gadd45b is a novel mediator of neuronal apoptosis in ischemic stroke. 2015 , 11, 353-60 | 34 |
| 610 | <i>Sedum mexicanum</i> Britt. Induces Apoptosis of Primary Rat Activated Hepatic Stellate Cells. 2015 , 2015, 194373 | 3 |
| 609 | Cadmium induces apoptosis in primary rat osteoblasts through caspase and mitogen-activated protein kinase pathways. 2015 , 16, 297-306 | 29 |
| 608 | LKB1 inhibition of NF- κ B in B cells prevents T follicular helper cell differentiation and germinal center formation. 2015 , 16, 753-68 | 18 |
| 607 | Fascaplysin induces caspase mediated crosstalk between apoptosis and autophagy through the inhibition of PI3K/AKT/mTOR signaling cascade in human leukemia HL-60 cells. 2015 , 116, 985-97 | 38 |
| 606 | Silver nanoparticles activate endoplasmic reticulum stress signaling pathway in cell and mouse models: The role in toxicity evaluation. 2015 , 61, 307-15 | 97 |
| 605 | Cell death induction by the BH3 mimetic GX15-070 in thyroid carcinoma cells. 2015 , 34, 69 | 13 |
| 604 | Supramolecular Hydrogelators and Hydrogels: From Soft Matter to Molecular Biomaterials. 2015 , 115, 13165-307 | 1162 |
| 603 | Effect of parthenolide on growth and apoptosis regulatory genes of human cancer cell lines. 2015 , 53, 104-9 | 25 |
| 602 | Di-O-demethylcurcumin protects SK-N-SH cells against mitochondrial and endoplasmic reticulum-mediated apoptotic cell death induced by A β 5-35. 2015 , 80, 110-9 | 29 |

| | | |
|-----|--|-----|
| 601 | A polysaccharide from <i>Andrographis paniculata</i> induces mitochondrial-mediated apoptosis in human hepatoma cell line (HepG2). 2015 , 36, 5179-86 | 11 |
| 600 | Purification, characterization and neuroprotective effects of a polysaccharide from <i>Gynostemma pentaphyllum</i> . 2015 , 122, 93-100 | 34 |
| 599 | Avian reovirus S1133-induced apoptosis is associated with Bip/GRP79-mediated Bim translocation to the endoplasmic reticulum. 2015 , 20, 481-90 | 15 |
| 598 | Effects of chronic high-fat feeding on skeletal muscle mass and function in middle-aged mice. 2015 , 27, 403-11 | 32 |
| 597 | The Biological Effects of Carbon Nanotubes in Plasma Membranes Damage, DNA Damage, and Mitochondrial Dysfunction. 2015 , 179-188 | |
| 596 | Comparative anti-proliferative activity of some new 2-(aryloxy)phenolate-palladium (II) complexes and cisplatin against some human cancer cell lines. 2015 , 49, 253-68 | 10 |
| 595 | Caspase-mediated Apoptotic Effects of Diol-type Ginseng Sapogenins on Human Hepatoma Cell Lines. 2015 , 36, 431-434 | 2 |
| 594 | Sam68 is cleaved by caspases under apoptotic cell death induced by ionizing radiation. 2015 , 56, 287-93 | 0 |
| 593 | Expression of caspase-3 predicts prognosis in advanced noncardia gastric cancer. 2015 , 32, 416 | 10 |
| 592 | Protective effects of tirofiban on ischemia/reperfusion-induced renal injury in vivo and in vitro. 2015 , 761, 144-52 | 10 |
| 591 | The Neuroprotective Effects of Decursin Isolated from <i>Angelica gigas</i> Nakai Against Amyloid β Protein-Induced Apoptosis in PC 12 Cells via a Mitochondria-Related Caspase Pathway. 2015 , 40, 1555-62 | 15 |
| 590 | Reduction of progesterone, estradiol and hCG secretion by perfluorooctane sulfonate via induction of apoptosis in human placental syncytiotrophoblasts. 2015 , 36, 575-80 | 28 |
| 589 | Light, lipids and photoreceptor survival: live or let die?. 2015 , 14, 1737-53 | 18 |
| 588 | PEITC induces apoptosis of Human Brain Glioblastoma GBM8401 Cells through the extrinsic- and intrinsic -signaling pathways. 2015 , 81, 32-40 | 39 |
| 587 | Apoptosis in human compressive myelopathy due to metastatic neoplasia. 2015 , 40, E450-7 | |
| 586 | Glutaminolysis and Transferrin Regulate Ferroptosis. 2015 , 59, 298-308 | 714 |
| 585 | Investigation of the effect of telmisartan on experimentally induced peripheral nerve injury in rats. 2015 , 125, 464-73 | 8 |
| 584 | Ponicidin induces apoptosis via JAK2 and STAT3 signaling pathways in gastric carcinoma. 2015 , 16, 1576-89 | 14 |

| | | |
|-----|---|----|
| 583 | Transcriptome analysis reveals strong and complex antiviral response in a mollusc. 2015 , 46, 131-44 | 90 |
| 582 | The mechanism of acacetin-induced apoptosis on oral squamous cell carcinoma. 2015 , 60, 1283-98 | 22 |
| 581 | Protective effects of ugonin K on hydrogen peroxide-induced osteoblast cell damage. 2015 , 15, 487-496 | 5 |
| 580 | Upregulation of PTP1B After Rat Spinal Cord Injury. 2015 , 38, 1891-902 | 6 |
| 579 | An insight into deltamethrin induced apoptotic calcium, p53 and oxidative stress signalling pathways. 2015 , 7, 25-34 | 18 |
| 578 | PMA-SiO ₂ catalyzed synthesis of indolo[2,3-c]quinolines as potent anti cancer agents. 2015 , 25, 2360-5 | 8 |
| 577 | Molecular biology II: protein function. 2015 , 33, 99-103 | |
| 576 | Schizandra chinensis extracts induce apoptosis in human gastric cancer cells via JNK/p38 MAPK activation and the ROS-mediated/mitochondria-dependent pathway. 2015 , 53, 212-9 | 20 |
| 575 | Apple polyphenol induces cell apoptosis, cell cycle arrest at G2/M phase, and mitotic catastrophe in human bladder transitional carcinoma cells. 2015 , 14, 384-394 | 20 |
| 574 | Design, synthesis and mechanism of novel shikonin derivatives as potent anticancer agents. 2015 , 5, 31759-31767 | 12 |
| 573 | Oncolytic adenovirus-mediated short hairpin RNA targeting MYCN gene induces apoptosis by upregulating RKIP in neuroblastoma. 2015 , 36, 6037-43 | 2 |
| 572 | Inhibition of 11βHSD2 expression by triclosan via induction of apoptosis in human placental syncytiotrophoblasts. 2015 , 100, E542-9 | 25 |
| 571 | Tetrastigma hemsleyanum (Sanyeqing) root tuber extracts induces apoptosis in human cervical carcinoma HeLa cells. 2015 , 165, 46-53 | 33 |
| 570 | A link between Notch and progesterone maintains the functionality of the rat corpus luteum. 2015 , 149, 1-10 | 24 |
| 569 | New organochalcogen multitarget drug: synthesis and antioxidant and antitumoral activities of chalcogenozidovudine derivatives. 2015 , 58, 3329-39 | 77 |
| 568 | Non-infectious in-cell HIV-1 protease assay utilizing translocalization of a fluorescent reporter protein and apoptosis induction. 2015 , 38, 2201-7 | 1 |
| 567 | Moxifloxacin and ciprofloxacin induces S-phase arrest and augments apoptotic effects of cisplatin in human pancreatic cancer cells via ERK activation. 2015 , 15, 581 | 60 |
| 566 | Inhibitory effect of Curcuma purpurascens Bl. rhizome on HT-29 colon cancer cells through mitochondrial-dependent apoptosis pathway. 2015 , 15, 15 | 21 |

| | | |
|-----|--|----|
| 565 | HN Protein of Newcastle Disease Virus Induces Apoptosis Through SAPK/JNK Pathway. 2015 , 177, 940-56 | 10 |
| 564 | Apoptotic markers and DNA damage are related to late phase of stroke: Involvement of dyslipidemia and inflammation. 2015 , 151, 369-78 | 12 |
| 563 | New Insights into the Role of Ubiquitin Networks in the Regulation of Antiapoptosis Pathways. 2015 , 318, 121-58 | 13 |
| 562 | Regulation and evasion of antiviral immune responses by porcine reproductive and respiratory syndrome virus. 2015 , 202, 101-11 | 58 |
| 561 | Isolation and characterization of a Solanum tuberosum subtilisin-like protein with caspase-3 activity (StSBTc-3). 2015 , 86, 137-146 | 15 |
| 560 | A novel bicistronic sensor vector for detecting caspase-3 activation. 2015 , 72, 11-8 | 7 |
| 559 | Randomized controlled trial of oral glutathione supplementation on body stores of glutathione. 2015 , 54, 251-63 | 55 |
| 558 | Tucumã fruit extracts (<i>Astrocaryum aculeatum</i> Meyer) decrease cytotoxic effects of hydrogen peroxide on human lymphocytes. 2015 , 173, 741-8 | 51 |
| 557 | Expression of apoptosis-related genes in liver-specific growth hormone receptor gene-disrupted mice is sex dependent. 2015 , 70, 44-52 | 13 |
| 556 | Lacidipine attenuates TNF- α -induced cardiomyocyte apoptosis. 2015 , 71, 60-5 | 4 |
| 555 | The multi-target drug BAI induces apoptosis in various human cancer cells through modulation of Bcl-xL protein. 2016 , 49, 2620-2628 | 2 |
| 554 | Minimal systems analysis of mitochondria-dependent apoptosis induced by cisplatin. 2016 , 20, 367-78 | 3 |
| 553 | Weaning Induced Hepatic Oxidative Stress, Apoptosis, and Aminotransferases through MAPK Signaling Pathways in Piglets. 2016 , 2016, 4768541 | 41 |
| 552 | Chemical Conditioning as an Approach to Ischemic Stroke Tolerance: Mitochondria as the Target. 2016 , 17, 351 | 25 |
| 551 | Autophagic Cell Death and Apoptosis Jointly Mediate Cisatracurium Besylate-Induced Cell Injury. 2016 , 17, 515 | 3 |
| 550 | A Homogeneous Polysaccharide from Fructus Schisandra chinensis (Turz.) Baill Induces Mitochondrial Apoptosis through the Hsp90/AKT Signaling Pathway in HepG2 Cells. 2016 , 17, | 10 |
| 549 | Neuroprotective Effects of Methyl 3,4-Dihydroxybenzoate against TBHP-Induced Oxidative Damage in SH-SY5Y Cells. 2016 , 21, | 12 |
| 548 | Computational Modeling Predicts Simultaneous Targeting of Fibroblasts and Epithelial Cells Is Necessary for Treatment of Pulmonary Fibrosis. 2016 , 7, 183 | 24 |

| | | |
|-----|---|-----|
| 547 | Cytotoxic and immunomodulatory effects of <i>Ebenus boissieri</i> Barbey on breast cancer cells. 2016 , 15, | 2 |
| 546 | Sodium fluoride induces apoptosis in cultured splenic lymphocytes from mice. 2016 , 7, 67880-67900 | 25 |
| 545 | Blocking the phosphatidylinositol 3-kinase pathway inhibits neuregulin-1-mediated rescue of neurotoxicity induced by A β -42. 2016 , 68, 1021-9 | 7 |
| 544 | HIV1-viral protein R (Vpr) mutations: associated phenotypes and relevance for clinical pathologies. 2016 , 26, 314-29 | 2 |
| 543 | Apoptotic Cell Death Induced by ofLBP6A, Lipopolysaccharide Binding Protein Model Peptide, Derived from <i>Paralichthys olivaceus</i> on MKN-28 Cells. 2016 , 77, 94-102 | 1 |
| 542 | Trichosanthin reduces the viability of SU-DHL-2 cells via the activation of the extrinsic and intrinsic apoptotic pathways. 2016 , 13, 403-11 | 10 |
| 541 | The paradox role of caspase cascade in ionizing radiation therapy. 2016 , 23, 88 | 29 |
| 540 | Phosphorylation of XIAP by CDK1-cyclin-B1 controls mitotic cell death. 2017 , 130, 502-511 | 10 |
| 539 | Ester-Modified Cyclometalated Iridium(III) Complexes as Mitochondria-Targeting Anticancer Agents. 2016 , 6, 38954 | 30 |
| 538 | Programmed necrosis in inflammation: Toward identification of the effector molecules. 2016 , 352, aaf2154 | 317 |
| 537 | Protective Effect of Aliskiren in Experimental Ischemic Stroke: Up-Regulated p-PI3K, p-AKT, Bcl-2 Expression, Attenuated Bax Expression. 2016 , 41, 2300-10 | 25 |
| 536 | Clinical application: Restoration of immune homeostasis by autophagy as a potential therapeutic target in sepsis. 2016 , 11, 1159-1167 | 14 |
| 535 | Pathway underlying small intestine apoptosis by dietary nickel chloride in broiler chickens. 2016 , 243, 91-106 | 11 |
| 534 | Detection of Apoptosis: From Bench Side to Clinical Practice. 2016 , 13-29 | 1 |
| 533 | Macromolecular Degradation Systems and Cardiovascular Aging. 2016 , 118, 1577-92 | 34 |
| 532 | Metabolomics screening identifies reduced L-carnitine to be associated with progressive emphysema. 2016 , 130, 273-87 | 28 |
| 531 | Maternal expression and early induction of histone gene transcription factor <i>Hinfp</i> sustains development in pre-implantation embryos. 2016 , 419, 311-320 | 8 |
| 530 | Regulation of CED-3 caspase localization and activation by <i>C. elegans</i> nuclear-membrane protein NPP-14. 2016 , 23, 958-964 | 8 |

| | | |
|-----|---|-----|
| 529 | Rabies virus matrix protein induces apoptosis by targeting mitochondria. 2016 , 347, 83-94 | 18 |
| 528 | Programmed Cell Death During <i>Caenorhabditis elegans</i> Development. 2016 , 203, 1533-62 | 52 |
| 527 | Bioassay-guided isolation of dehydrocostus lactone from <i>Saussurea lappa</i> : A new targeted cytosolic thioredoxin reductase anticancer agent. 2016 , 607, 20-6 | 22 |
| 526 | Multiple effects of Xihuang pill aqueous extract on the Hs578T triple-negative breast cancer cell line. 2016 , 5, 559-566 | 16 |
| 525 | Cytocompatibility testing of cyclodextrin-functionalized antimicrobial textiles-a comprehensive approach. 2016 , 27, 190 | 6 |
| 524 | Resveratrol attenuates acute kidney injury by inhibiting death receptor-mediated apoptotic pathways in a cisplatin-induced rat model. 2016 , 14, 3683-9 | 28 |
| 523 | The SMAC mimetic BV6 induces cell death and sensitizes different cell lines to TNF- α and TRAIL-induced apoptosis. 2016 , 241, 2015-2022 | 14 |
| 522 | Synergy Between G_{β} Deficiency and GLP-1 Analog Treatment in Preserving Functional β Cell Mass in Experimental Diabetes. 2016 , 30, 543-56 | 19 |
| 521 | The cellular interactome for glycoprotein 5 of the Chinese highly pathogenic porcine reproductive and respiratory syndrome virus. 2016 , 15, 1833-1845 | 2 |
| 520 | Integrating Enzymatic Self-Assembly and Mitochondria Targeting for Selectively Killing Cancer Cells without Acquired Drug Resistance. 2016 , 138, 16046-16055 | 198 |
| 519 | Combination of 2-deoxy d-glucose and metformin for synergistic inhibition of non-small cell lung cancer: A reactive oxygen species and P-p38 mediated mechanism. 2016 , 84, 1575-1584 | 9 |
| 518 | The antioxidant N-acetyl cysteine suppresses lidocaine-induced intracellular reactive oxygen species production and cell death in neuronal SH-SY5Y cells. 2016 , 16, 104 | 23 |
| 517 | Neuroprotective effect of acute melatonin treatment on hippocampal neurons against irradiation by inhibition of caspase-3. 2016 , 11, 2385-2390 | 7 |
| 516 | The immunohistochemical evaluation of selected markers in the left atrium of dogs with end-stage dilated cardiomyopathy and myxomatous mitral valve disease - a preliminary study. 2016 , 69, 18 | 3 |
| 515 | Apoptosis-inducing effects of jujube ($Z\bar{B}$) seed extracts on human Jurkat leukemia T cells. 2016 , 11, 15 | 6 |
| 514 | The BH3 mimetic drug ABT-737 induces apoptosis and acts synergistically with chemotherapeutic drugs in thyroid carcinoma cells. 2016 , 16, 27 | 19 |
| 513 | Targeting Cell Death Pathways for Therapeutic Intervention in Kidney Diseases. 2016 , 36, 153-61 | 15 |
| 512 | Hepatic and renal toxicological evaluations of an industrial ovotoxic chemical, 4-vinylcyclohexene diepoxide, in both sexes of Wistar rats. 2016 , 45, 28-40 | 7 |

- 511 Cytotoxic withanolides from *Physalis angulata* var. *villosa* and the apoptosis-inducing effect via ROS generation and the activation of MAPK in human osteosarcoma cells. **2016**, 6, 53089-53100 18
- 510 Transcriptome wide analyses reveal a sustained cellular stress response in the gill tissue of *Trematomus bernacchii* after acclimation to multiple stressors. **2016**, 17, 127 60
- 509 Radio-frequency triggered heating and drug release using doxorubicin-loaded LSMO nanoparticles for bimodal treatment of breast cancer. **2016**, 145, 878-890 21
- 508 Lysosome-mitochondria-mediated apoptosis specifically evoked in cancer cells induced by gold nanorods. **2016**, 11, 1993-2006 21
- 507 Shikonin induces apoptosis of HaCaT cells via the mitochondrial, Erk and Akt pathways. **2016**, 13, 3009-16 14
- 506 Benzyl isothiocyanate (BITC) induces apoptosis of GBM 8401 human brain glioblastoma multiforms cells via activation of caspase-8/Bid and the reactive oxygen species-dependent mitochondrial pathway. **2016**, 31, 1751-1760 16
- 505 Analysis of Plasmalogen Species in Foodstuffs. **2016**, 51, 199-210 28
- 504 Synthesis and biological evaluation of novel asiatic acid derivatives with anticancer activity. **2016**, 6, 3967-3985 10
- 503 Improved cellular thermotolerance in cloned Holstein cattle derived with cytoplasts from a thermotolerant breed. **2016**, 85, 709-17 5
- 502 Development of gelatin nanoparticles conjugated with phytohemagglutinin erythroagglutinating loaded with gemcitabine for inducing apoptosis in non-small cell lung cancer cells. **2016**, 4, 2444-2454 15
- 501 Trace Mineral Overload Induced Hepatic Oxidative Damage and Apoptosis in Pigs with Long-Term High-Level Dietary Mineral Exposure. **2016**, 64, 1841-9 13
- 500 CASP 3 genetic polymorphisms and risk of Hepatocellular carcinoma: a case-control study in a Chinese population. **2016**, 37, 8985-91 9
- 499 Anti-Neoplastic Activity of Litchi chinensis Leaf Extract Against Ehrlich Ascites Carcinoma in Mice. **2016**, 22, 11-26
- 498 Studies on the role of apoptosis after transient myocardial ischemia: genetic deletion of the executioner caspases-3 and -7 does not limit infarct size and ventricular remodeling. **2016**, 111, 18 28
- 497 Structure activity relationship studies on cytotoxicity and the effects on steroid receptors of AB-functionalized cholestanes. **2016**, 159, 154-69 23
- 496 Dehydroepiandrosterone ameliorates H₂O₂-induced Leydig cells oxidation damage and apoptosis through inhibition of ROS production and activation of PI3K/Akt pathways. **2016**, 70, 126-39 30
- 495 Caspase Allosteric and Conformational Selection. **2016**, 116, 6666-706 44
- 494 Rhinacanthin C ameliorates hyperglycaemia, hyperlipidemia and pancreatic destruction in streptozotocin-nicotinamide induced adult male diabetic rats. **2016**, 771, 173-90 26

| | | |
|-----|---|-----|
| 493 | Exopolysaccharide from <i>Trichoderma pseudokoningii</i> induces the apoptosis of MCF-7 cells through an intrinsic mitochondrial pathway. 2016 , 136, 1065-73 | 26 |
| 492 | Cyanidin-3-O-glucoside Induces Apoptosis and Inhibits Migration of Tumor Necrosis Factor- β Treated Rat Aortic Smooth Muscle Cells. 2016 , 16, 251-9 | 12 |
| 491 | Estrogens as neuroprotectants: Estrogenic actions in the context of cognitive aging and brain injury. 2017 , 157, 188-211 | 111 |
| 490 | Synergistic Apoptotic Effect of D-Fraction From <i>Grifola frondosa</i> and Vitamin C on Hepatocellular Carcinoma SMMC-7721 Cells. 2017 , 16, 205-214 | 11 |
| 489 | Cancer as robust intrinsic state shaped by evolution: a key issues review. 2017 , 80, 042701 | 34 |
| 488 | The UCP2-related mitochondrial pathway participates in rhain-induced apoptosis in HK-2 cells. 2017 , 6, 297-304 | 8 |
| 487 | Dual-functional drug liposomes in treatment of resistant cancers. 2017 , 115, 46-56 | 84 |
| 486 | Mushrooms: A rich source of the antioxidants ergothioneine and glutathione. 2017 , 233, 429-433 | 122 |
| 485 | Phytochemistry and Pharmacological Activities of the Genus <i>Swertia</i> (Gentianaceae): A Review. 2017 , 45, 667-736 | 21 |
| 484 | L-PGDS Mediates Vagus Nerve Stimulation-Induced Neuroprotection in a Rat Model of Ischemic Stroke by Suppressing the Apoptotic Response. 2017 , 42, 644-655 | 18 |
| 483 | Flavored little cigar smoke induces cytotoxicity and apoptosis in airway epithelia. 2017 , 3, 17019 | 6 |
| 482 | Effects of organophosphorus flame retardant TDCPP on normal human corneal epithelial cells: Implications for human health. 2017 , 230, 22-30 | 30 |
| 481 | Synthesis, structures and biomolecular interactions of new silver(i) 5,5-diethylbarbiturate complexes of monophosphines targeting Gram-positive bacteria and breast cancer cells. 2017 , 46, 8110-8124 | 26 |
| 480 | Targeting the Akt, GSK-3, Bcl-2 axis in acute myeloid leukemia. 2017 , 65, 36-58 | 27 |
| 479 | Methylmalonate Induces Inflammatory and Apoptotic Potential: A Link to Glial Activation and Neurological Dysfunction. 2017 , 76, 160-178 | 9 |
| 478 | Impairment of preimplantation and postimplantation embryonic development through intrinsic apoptotic processes by ginsenoside Rg1 in vitro and in vivo. 2017 , 32, 1937-1951 | 12 |
| 477 | Neuroprotective role of <i>Ginkgo biloba</i> against cognitive deficits associated with Bisphenol A exposure: An animal model study. 2017 , 108, 199-212 | 15 |
| 476 | Dichloromethane fraction of <i>Asiasarum heterotropoides</i> induces S phase arrest and apoptosis in KB oral epithelial carcinoma cells. 2017 , 89, 559-564 | 3 |

| | | |
|-----|---|-----|
| 475 | Rational design and synthesis of 2-anilinopyridinyl-benzothiazole Schiff bases as antimitotic agents. 2017 , 27, 2549-2558 | 17 |
| 474 | Cytotoxic and apoptosis-inducing activity of C steroids from the roots of <i>Cynanchum atratum</i> . 2017 , 122, 1-8 | 12 |
| 473 | Functional Effects of AKT3 on Aurora Kinase Inhibitor-induced Aneuploidy. 2017 , 292, 1910-1924 | 4 |
| 472 | Control of stress-induced depressive disorders by So-ochim-tang-gamibang, a Korean herbal medicine. 2017 , 196, 141-150 | 25 |
| 471 | The TRPC1 Ca-permeable channel inhibits exercise-induced protection against high-fat diet-induced obesity and type II diabetes. 2017 , 292, 20799-20807 | 21 |
| 470 | Synthesis and antiproliferative properties of new hydrophilic esters of triterpenic acids. 2017 , 140, 403-420 | 17 |
| 469 | Administration of 5-methoxyindole-2-carboxylic acid that potentially targets mitochondrial dihydrolipoamide dehydrogenase confers cerebral preconditioning against ischemic stroke injury. 2017 , 113, 244-254 | 11 |
| 468 | Docetaxel or abiraterone in addition to androgen deprivation therapy in metastatic castration-sensitive prostate cancer. 2017 , 13, 1911-1913 | 2 |
| 467 | Cell death pathways of particulate matter toxicity. 2017 , 188, 32-48 | 82 |
| 466 | Effect of borrelidin on hepatocellular carcinoma cells in vitro and in vivo. 2017 , 7, 44401-44409 | 7 |
| 465 | Anticancer effects of ginsenoside Rk3 on non-small cell lung cancer cells: in vitro and in vivo. 2017 , 8, 3723-3736 | 34 |
| 464 | Birth weight, umbilical and placental traits in relation to neonatal loss in cloned pigs. 2017 , 57, 94-101 | 11 |
| 463 | Effect of conjugated linoleic acids and omega-3 fatty acids with or without resistance training on muscle mass in high-fat diet-fed middle-aged mice. 2017 , 102, 1500-1512 | 6 |
| 462 | Oridonin synergizes with Nutlin-3 in osteosarcoma cells by modulating the levels of multiple Bcl-2 family proteins. 2017 , 39, 1010428317701638 | 10 |
| 461 | <i>Cyperus amuricus</i> induces G1 arrest and apoptosis through endoplasmic reticulum stress and mitochondrial signaling in human hepatocellular carcinoma Hep3B cells. 2017 , 208, 157-164 | 6 |
| 460 | Differences in cell death and cell cycle following fucoidan treatment in high-density HT-29 colon cancer cells. 2017 , 15, 4116-4122 | 22 |
| 459 | MLKL, the Protein that Mediates Necroptosis, Also Regulates Endosomal Trafficking and Extracellular Vesicle Generation. 2017 , 47, 51-65.e7 | 196 |
| 458 | The effect of <i>Astragalus</i> polysaccharides on attenuation of diabetic cardiomyopathy through inhibiting the extrinsic and intrinsic apoptotic pathways in high glucose -stimulated H9C2 cells. 2017 , 17, 310 | 33 |

| | | |
|-----|--|----|
| 457 | Investigation of platelet apoptosis in adult patients with chronic immune thrombocytopenia. 2017 , 22, 155-161 | 19 |
| 456 | Mir363-3p improves ischemic stroke outcomes in female but not male rats. 2017 , 107, 168-181 | 24 |
| 455 | Effects of Vitamin E with Different Levels or Sources of Dietary Lipid on the Growth and Expression of Inflammatory, Oxidative Stress, and Apoptotic Genes in the Head Kidney of Olive Flounder, <i>Paralichthys olivaceus</i> . 2017 , 48, 518-530 | 3 |
| 454 | Cellular thermotolerance is inheritable from Holstein cattle cloned with ooplasts of Taiwan native yellow cattle. 2017 , 88, 244-253 | 2 |
| 453 | Apoptosis Inducing Factor Is Involved in Stretch-Induced Apoptosis of Myoblast via a Caspase-9 Independent Pathway. 2017 , 118, 829-838 | 11 |
| 452 | <i>Mycobacterium tuberculosis</i> multi-drug-resistant strain M induces IL-17 IFN γ CD4 T cell expansion through an IL-23 and TGF- β -dependent mechanism in patients with MDR-TB tuberculosis. 2017 , 187, 160-173 | 16 |
| 451 | Di(2-ethylhexyl) phthalate induces apoptosis through mitochondrial pathway in GC-2spd cells. 2017 , 32, 1055-1064 | 24 |
| 450 | Protective effects of carnosic acid against mitochondria-mediated injury in H9c2 cardiomyocytes induced by hypoxia/reoxygenation. 2017 , 14, 5629-5634 | 13 |
| 449 | Grape seed proanthocyanidins induce mitochondrial pathway-mediated apoptosis in human colorectal carcinoma cells. 2017 , 14, 5853-5860 | 6 |
| 448 | Silencing of induces dysregulation of cell cycle and ROS metabolism in bladder cancer cells via PPARE β IRF1 feedback loop. 2017 , 8, 2282-2295 | 26 |
| 447 | AG36 Inhibits Human Breast Cancer Cells Proliferation by Promotion of Apoptosis and. 2017 , 8, 15 | 4 |
| 446 | Hepatoprotective Effects of Kaempferol-3-O- β -Arabinopyranosyl-7-O- β -Rhamnopyranoside on d-Galactosamine and Lipopolysaccharide Caused Hepatic Failure in Mice. 2017 , 22, | 10 |
| 445 | Protective Effects of Fucoidan on A β 5-35 and d-Gal-Induced Neurotoxicity in PC12 Cells and d-Gal-Induced Cognitive Dysfunction in Mice. 2017 , 15, | 53 |
| 444 | β Tocotrienol Inhibits Proliferation and Induces Apoptosis Via the Mitochondrial Pathway in Human Cervical Cancer HeLa Cells. 2017 , 22, | 25 |
| 443 | Preparation, Characterization and Application of Polysaccharide-Based Metallic Nanoparticles: A Review. 2017 , 9, | 78 |
| 442 | Cytotoxicity Study of Cyclopentapeptide Analogues of Marine Natural Product Galaxamide towards Human Breast Cancer Cells. 2017 , 2017, 8392035 | 7 |
| 441 | Dai-Huang-Fu-Zi-Tang Alleviates Intestinal Injury Associated with Severe Acute Pancreatitis by Regulating Mitochondrial Permeability Transition Pore of Intestinal Mucosa Epithelial Cells. 2017 , 2017, 4389048 | 4 |
| 440 | Histopathological Changes in the Kidney following Congestive Heart Failure by Volume Overload in Rats. 2017 , 2017, 6894040 | 8 |

| | | |
|-----|---|----|
| 439 | Pathological alterations in liver injury following congestive heart failure induced by volume overload in rats. 2017 , 12, e0184161 | 14 |
| 438 | Sterile Inflammation and Degradation Systems in Heart Failure. 2017 , 81, 622-628 | 13 |
| 437 | Review on the Potential Therapeutic Roles of in the Treatment of Patients with Cancer: Involvement of Apoptosis: - Black cummin and cancer. 2017 , 20, 158-172 | 31 |
| 436 | Propofol attenuates cytokine-mediated upregulation of expression of inducible nitric oxide synthase and apoptosis during regeneration post-partial hepatectomy. 2017 , 32, 396-406 | 3 |
| 435 | Rhein protects against cerebral ischemic-/reperfusion-induced oxidative stress and apoptosis in rats. 2018 , 41, 2802-2812 | 32 |
| 434 | Chlorogenic Acid Improves Intestinal Development via Suppressing Mucosa Inflammation and Cell Apoptosis in Weaned Pigs. 2018 , 3, 2211-2219 | 24 |
| 433 | ASC- and caspase-8-dependent apoptotic pathway diverges from the NLR4 inflammasome in macrophages. 2018 , 8, 3788 | 78 |
| 432 | Does altered protein metabolism interfere with postmortem degradation analysis for PMI estimation?. 2018 , 132, 1349-1356 | 9 |
| 431 | Intravoxel Incoherent Motion Diffusion-weighted MR Imaging for Early Evaluation of the Effect of Radiofrequency Ablation in Rabbit Liver VX2 Tumors. 2018 , 25, 1128-1135 | 5 |
| 430 | Quantitative biochemical characterization and biotechnological production of caspase modulator, XIAP: Therapeutic implications for apoptosis-associated diseases. 2018 , 1862, 1602-1611 | 3 |
| 429 | Synergistic antitumor effect of brusatol combined with cisplatin on colorectal cancer cells. 2018 , 41, 1447-1454 | 10 |
| 428 | Sex-related differences in oxidative stress and neurodegeneration. 2018 , 133, 21-27 | 47 |
| 427 | Fenofibrate inhibits mTOR-p70S6K signaling and simultaneously induces cell death in human prostate cancer cells. 2018 , 496, 70-75 | 17 |
| 426 | The novel brassinosteroid analog BR4848 inhibits angiogenesis in human endothelial cells and induces apoptosis in human cancer cells in vitro. 2018 , 178, 263-271 | 6 |
| 425 | Effects of high temperature on biochemical parameters, oxidative stress, DNA damage and apoptosis of pufferfish (Takifugu obscurus). 2018 , 150, 190-198 | 51 |
| 424 | Picolyl amides of betulinic acid as antitumor agents causing tumor cell apoptosis. 2018 , 145, 41-50 | 24 |
| 423 | Reversal Effects of Bound Polyphenol from Foxtail Millet Bran on Multidrug Resistance in Human HCT-8/Fu Colorectal Cancer Cell. 2018 , 66, 5190-5199 | 26 |
| 422 | Antitumor Properties of CLA-Enriched Food Products. 2018 , 70, 529-545 | 9 |

| | | |
|-----------------|---|----|
| 4 ²¹ | Azilsartan and its Zn(II) complex. Synthesis, anticancer mechanisms of action and binding to bovine serum albumin. 2018 , 48, 205-220 | 17 |
| 4 ²⁰ | Paraquat initially damages cochlear support cells leading to anoikis-like hair cell death. 2018 , 364, 129-141 | 14 |
| 4 ¹⁹ | Anti-angiogenic and pro-apoptotic effects of a small-molecule JFD-WS in in vitro and breast cancer xenograft mouse models. 2018 , 39, 1711-1724 | 1 |
| 4 ¹⁸ | Piperlongumine Induces Apoptosis in Human Melanoma Cells Via Reactive Oxygen Species Mediated Mitochondria Disruption. 2018 , 70, 502-511 | 20 |
| 4 ¹⁷ | Nanoscale gizmos - the novel fluorescent probes for monitoring protein activity. 2018 , 133, 83-95 | 3 |
| 4 ¹⁶ | Spirulina platensis prevents high glucose-induced oxidative stress mitochondrial damage mediated apoptosis in cardiomyoblasts. 2018 , 70, 523-536 | 7 |
| 4 ¹⁵ | The anti-tumor effect of pachymic acid on osteosarcoma cells by inducing PTEN and Caspase 3/7-dependent apoptosis. 2018 , 72, 57-63 | 20 |
| 4 ¹⁴ | Antiapoptotic effects of caspase inhibitors on HO-treated lung cancer cells concerning oxidative stress and GSH. 2018 , 441, 125-134 | 5 |
| 4 ¹³ | Caspase inhibitors: a review of recently patented compounds (2013-2015). 2018 , 28, 47-59 | 30 |
| 4 ¹² | NF-B and JNK mediated apoptosis and G/G arrest of HeLa cells induced by rubiarbonol G, an arborinane-type triterpenoid from Rubia yunnanensis. 2018 , 220, 220-227 | 8 |
| 4 ¹¹ | To eat or not to eat-the metabolic flavor of ferroptosis. 2018 , 51, 58-64 | 60 |
| 4 ¹⁰ | In vitro apoptotic mechanism of a novel synthetic Quinazolinyl derivative: Induces caspase-dependent intrinsic pathway on THP-1, leukemia cell line. 2018 , 280, 117-127 | 3 |
| 4 ⁰⁹ | Inotodiol protects PC12 cells against injury induced by oxygen and glucose deprivation/restoration through inhibiting oxidative stress and apoptosis. 2018 , 16, 126-132 | 11 |
| 4 ⁰⁸ | Effects of Local Anesthetics on Cellular Necrosis, Apoptosis and Inflammatory Modulation: Short Review. 2018 , 09, | 1 |
| 4 ⁰⁷ | Mangiferin: An effective therapeutic agent against several disorders (Review). 2018 , 18, 4775-4786 | 43 |
| 4 ⁰⁶ | Alginate oligosaccharide alleviates enterotoxigenic Escherichia coli-induced intestinal mucosal disruption in weaned pigs. 2018 , 9, 6401-6413 | 17 |
| 4 ⁰⁵ | An indole alkaloid produced by Indonesian marine sponge Raspailia ramosa as an inhibitory of the panc-1 cell adapted to nutrient starvation. 2018 , 216, 012042 | |
| 4 ⁰⁴ | Eriodictyol protects H9c2 cardiomyocytes against the injury induced by hypoxia/reoxygenation by improving the dysfunction of mitochondria. 2019 , 17, 551-557 | 8 |

| | | |
|-----|--|-----|
| 403 | Hydrogen peroxide inhibits the growth of lung cancer cells via the induction of cell death and G1-phase arrest. 2018 , 40, 1787-1794 | 9 |
| 402 | Indole-3-Carbinol Induces Apoptosis in Human Osteosarcoma MG-63 and U2OS Cells. 2018 , 2018, 7970618 | 14 |
| 401 | Copper nanoparticle-induced uterine injury in female rats. 2019 , 34, 252-261 | 5 |
| 400 | Apoptotic effect of pyrroloquinoline quinone on chondrosarcoma cells through activation of the mitochondrial caspase-dependent and caspase-independent pathways. 2018 , 40, 1614-1620 | 6 |
| 399 | Curcumin induces apoptosis and inhibits angiogenesis in murine malignant mesothelioma. 2018 , 53, 2531-2541 | 17 |
| 398 | In vitro evaluation of the effects of capsaicin on normal and cancerous cells of human cartilage. 2018 , 42, 422-434 | 1 |
| 397 | Fas promoter -670 polymorphism and the risk of cervical cancer: A case-control study in multi-ethnic Malaysia. 2018 , 4, 1 | 1 |
| 396 | HCV non-structural NS4A protein of genotype 3a induces mitochondria mediated death by activating Bax and the caspase cascade. 2018 , 124, 346-355 | 4 |
| 395 | Antineoplastic potential of the aqueous crude extract of <i>Eugenia uniflora</i> L. in human cervical cancer. 2018 , 54, | 2 |
| 394 | Apoptosis and autophagy induction of Seleno-β-lactoglobulin (Se-βlg) on hepatocellular carcinoma cells lines. 2018 , 49, 412-423 | 9 |
| 393 | Programmable protein circuits in living cells. 2018 , 361, 1252-1258 | 138 |
| 392 | Pd(II) and Pt(II) saccharinate complexes of bis(diphenylphosphino)propane/butane: Synthesis, structure, antiproliferative activity and mechanism of action. 2018 , 158, 534-547 | 16 |
| 391 | Association of CASP3 genetic polymorphisms rs1049216, rs2705897 and rs4647603 with the risk of prostate cancer in Galicia (NW Spain). 2018 , 679, 126-132 | 2 |
| 390 | <i>Melissa officinalis</i> L. ethanolic extract inhibits the growth of a lung cancer cell line by interfering with the cell cycle and inducing apoptosis. 2018 , 9, 3134-3142 | 14 |
| 389 | Endoplasmic reticulum stress-mediated autophagy protects against β-dimethylacrylshikonin-induced apoptosis in lung adenocarcinoma cells. 2018 , 109, 1889-1901 | 12 |
| 388 | Green synthesis and characterization of biologically active nanosilver from seed extract of <i>Gardenia jasminoides</i> Ellis. 2018 , 185, 126-135 | 54 |
| 387 | Palladium(ii) and platinum(ii) saccharinate complexes with bis(diphenylphosphino)methane/ethane: synthesis, S-phase arrest and ROS-mediated apoptosis in human colon cancer cells. 2018 , 47, 11397-11410 | 23 |
| 386 | Sesquiterpene lactone from <i>Artemisia argyi</i> induces gastric carcinoma cell apoptosis via activating NADPH oxidase/reactive oxygen species/mitochondrial pathway. 2018 , 837, 164-170 | 9 |

| | | |
|-----|--|-----|
| 385 | Oxymatrine induces cell cycle arrest and apoptosis and suppresses the invasion of human glioblastoma cells through the EGFR/PI3K/Akt/mTOR signaling pathway and STAT3. 2018 , 40, 867-876 | 30 |
| 384 | Antitumor effects of Xi Huang pills on MDA-MB-231 cells in vitro and in vivo. 2018 , 18, 2068-2078 | 2 |
| 383 | The Tucumã of Amazonas <i>Astrocaryum aculeatum</i> . 2018 , 419-425 | 5 |
| 382 | Thymoquinone induces apoptosis in bladder cancer cell via endoplasmic reticulum stress-dependent mitochondrial pathway. 2018 , 292, 65-75 | 42 |
| 381 | Enzymatic Assemblies Disrupt the Membrane and Target Endoplasmic Reticulum for Selective Cancer Cell Death. 2018 , 140, 9566-9573 | 117 |
| 380 | Atypical APC/C-dependent degradation of Mcl-1 provides an apoptotic timer during mitotic arrest. 2018 , 37, | 18 |
| 379 | Caspases maintain tissue integrity by an apoptosis-independent inhibition of cell migration and invasion. 2018 , 9, 2806 | 16 |
| 378 | Involvement of adipose tissue inflammation and dysfunction in virus-induced type 1 diabetes. 2018 , 238, 61-75 | 6 |
| 377 | pigment rubropunctatin derivative FZU-H reduces A β (1-42)-induced neurotoxicity in Neuro-2A cells. 2018 , 8, 17389-17398 | 0 |
| 376 | Plant Lectins: Bioactivities and Bioapplications. 2018 , 1-42 | 9 |
| 375 | NFATc1 is a tumor suppressor in hepatocellular carcinoma and induces tumor cell apoptosis by activating the FasL-mediated extrinsic signaling pathway. 2018 , 7, 4701-4717 | 14 |
| 374 | Sodium fluoride causes oxidative stress and apoptosis in cementoblasts. 2018 , 294, 34-39 | 10 |
| 373 | Synthesis, structures and anticancer potentials of platinum(II) saccharinate complexes of tertiary phosphines with phenyl and cyclohexyl groups targeting mitochondria and DNA. 2018 , 155, 609-622 | 38 |
| 372 | The natural compound GL22, isolated from Ganoderma mushrooms, suppresses tumor growth by altering lipid metabolism and triggering cell death. 2018 , 9, 689 | 19 |
| 371 | Seawater acidification aggravated cadmium toxicity in the oyster <i>Crassostrea gigas</i> : Metal bioaccumulation, subcellular distribution and multiple physiological responses. 2018 , 642, 809-823 | 38 |
| 370 | Plasmalogens Inhibit Endocytosis of Toll-like Receptor 4 to Attenuate the Inflammatory Signal in Microglial Cells. 2019 , 56, 3404-3419 | 13 |
| 369 | Reactive Oxygen Species in Plasma Medical Science (PAM and Cancer Therapy). 2019 , 249-318 | 1 |
| 368 | Salidroside attenuates dextran sulfate sodium-induced colitis in mice via SIRT1/FoxOs signaling pathway. 2019 , 861, 172591 | 9 |

| | | |
|-----|--|----|
| 367 | Cancer Metabolism and the Evasion of Apoptotic Cell Death. 2019 , 11, | 50 |
| 366 | AKT1-targeted proapoptotic activity of compound K in human breast cancer cells. 2019 , 43, 692-698 | 30 |
| 365 | Growth-inhibitory effects of anthracycline-loaded bacterial magnetosomes against hepatic cancer and. 2019 , 14, 1663-1680 | 11 |
| 364 | Two ways of escaping from oxidative RNA damage: Selective degradation and cell death. 2019 , 81, 102666 | 13 |
| 363 | Testicular toxicity of gentamicin in adult rats: Ameliorative effect of lycopene. 2019 , 38, 1302-1313 | 18 |
| 362 | Diallyl Disulfide Induces Apoptosis and Autophagy in Human Osteosarcoma MG-63 Cells through the PI3K/Akt/mTOR Pathway. 2019 , 24, | 33 |
| 361 | Activation of DR3 signaling causes loss of ILC3s and exacerbates intestinal inflammation. 2019 , 10, 3371 | 18 |
| 360 | Detoxification, Apoptosis, and Immune Transcriptomic Responses of the Gill Tissue of Bay Scallop Following Exposure to the Algicide Thiazolidinedione 49. 2019 , 9, | 2 |
| 359 | Identification and characterization of caspase-7 in pufferfish (Takifugu obscurus) in response to bacterial infection and cell apoptosis. 2019 , 512, 734268 | 5 |
| 358 | AEBP1 down regulation induced cell death pathway depends on PTEN status of glioma cells. 2019 , 9, 14577 | 8 |
| 357 | AuNP-peptide probe for caspase-3 detection in living cells by SERS. 2019 , 144, 1275-1281 | 17 |
| 356 | Human ether- α -go-go-related gene mutation L539fs/47-hERG leads to cell apoptosis through the endoplasmic reticulum stress pathway. 2019 , 43, 1253-1262 | 1 |
| 355 | Fenofibrate potentiates chemosensitivity to human breast cancer cells by modulating apoptosis via AKT/NF- κ B pathway. 2019 , 12, 773-783 | 6 |
| 354 | Effect of Chronic Exposure to Methomyl on Tissue Damage and Apoptosis in Testis of Tilapia (Oreochromis niloticus) and Recovery Pattern. 2019 , 102, 371-376 | 6 |
| 353 | Platelet Apoptosis Can Be Triggered Bypassing the Death Receptors. 2019 , 25, 1076029619853641 | 5 |
| 352 | Involvement of MnSOD Ala16Val polymorphism in epilepsy: A relationship with seizure type, inflammation, and metabolic syndrome. 2019 , 711, 143924 | 7 |
| 351 | The novel non-immunological role and underlying mechanisms of B7-H3 in tumorigenesis. 2019 , 234, 21785-21795 | 7 |
| 350 | Subcellular targets of zinc oxide nanoparticles during the aging process: role of cross-talk between mitochondrial dysfunction and endoplasmic reticulum stress in the genotoxic response. 2019 , | 9 |

| | | |
|-----|--|-----|
| 349 | Seneca Valley Virus 2C and 3C Induce Apoptosis via Mitochondrion-Mediated Intrinsic Pathway. 2019 , 10, 1202 | 20 |
| 348 | and Induction of p53-Dependent Apoptosis by Extract of in A549 Human Caucasian Lung Carcinoma Cancer Cells Is Mediated Through Akt Signaling Pathway. 2019 , 9, 406 | 13 |
| 347 | Mechanism of Apoptosis Induced by Curcumin in Colorectal Cancer. 2019 , 20, | 65 |
| 346 | Evaluation of in Vitro Bio-Activities Effects of WST (Wushanshencha). 2019 , 9, 1325 | 5 |
| 345 | Enhancing effect of cystamine in its amides with betulinic acid as antimicrobial and antitumor agent in vitro. 2019 , 148, 91-98 | 10 |
| 344 | Inflammation and Metabolism in Cancer Cell-Mitochondria Key Player. 2019 , 9, 348 | 60 |
| 343 | Rescue of degenerating neurons and cells by stem cell released molecules: using a physiological renormalization strategy. 2019 , 7, e14072 | 7 |
| 342 | Agaropentaose protects SH-SY5Y cells against 6-hydroxydopamine-induced neurotoxicity through modulating NF- κ B and p38MAPK signaling pathways. 2019 , 57, 222-232 | 8 |
| 341 | Hollow Prussian Blue Nanozymes Drive Neuroprotection against Ischemic Stroke via Attenuating Oxidative Stress, Counteracting Inflammation, and Suppressing Cell Apoptosis. 2019 , 19, 2812-2823 | 102 |
| 340 | Synthesis, characterization and antiproliferative activity of seco analogues of brassinosteroids. 2019 , 146, 1-13 | 5 |
| 339 | Oxidative stress mediated cytotoxicity of tellurite in MDA-MB-231 breast cancer cells. 2019 , 31, 980-986 | |
| 338 | CASP9 c.-1339A>G and CASP3 c.-1191A>G polymorphisms alter susceptibility and clinical aspects of head and neck squamous cell carcinoma. 2019 , 41, 2665-2670 | 3 |
| 337 | Maslinic Acid Inhibits Colon Tumorigenesis by the AMPK-mTOR Signaling Pathway. 2019 , 67, 4259-4272 | 21 |
| 336 | Graphene in Neuroscience. 2019 , 337-351 | 0 |
| 335 | Neuroprotective effects of the new Na channel blocker rs100642 in global ischemic brain injury. 2019 , 15, 467-474 | 4 |
| 334 | Real-Time in Situ Visualizing of the Sequential Activation of Caspase Cascade Using a Multicolor Gold-Selenium Bonding Fluorescent Nanoprobe. 2019 , 91, 5994-6002 | 27 |
| 333 | Proteome-wide Analysis of Cellular Response to Ultraviolet Light for Biomaterial Synthesis and Modification. 2019 , 5, 2111-2116 | 36 |
| 332 | The in vitro and in vivo anti-melanoma effects of hydroxyapatite nanoparticles: influences of material factors. 2019 , 14, 1177-1191 | 12 |

| | | | |
|-----|--|---------------------|----|
| 331 | Methyl B12 protects PC12 cells against cytotoxicity induced by Aβ | 2019, 120, 11921 | 6 |
| 330 | Formononetin ameliorates high glucose-induced endothelial dysfunction by inhibiting the JAK/STAT signaling pathway. | 2019, 20, 2893-2901 | 5 |
| 329 | In Vitro Analysis of Antioxidant, Anticancer, and Bioactive Components of Apocynum venetum Tea Extracts. | 2019, 2019, 1-13 | 8 |
| 328 | Yiqihuoxue Formula Activates Autophagy and Offers Renoprotection in a Rat Model of Adenine-Induced Kidney Disease. | 2019, 2019, 3423981 | 3 |
| 327 | The inhibitor of human bladder epithelial cancer cells from Indonesian marine sponge of Petrosia sp.. | 2019, 348, 012025 | |
| 326 | ANTI-TUMOUR ACTIVITY OF BROMOPYRROLE ALKALOIDS AGAINST HUMAN BREAST TUMOUR (MCF-7) THROUGH APOPTOSIS INDUCTION. | 2019, 94-100 | 1 |
| 325 | Ganoderma and Health. | 2019, | 2 |
| 324 | Effects of prostaglandin F (PGF) on cell-death pathways in the bovine corpus luteum (CL). | 2019, 15, 416 | 6 |
| 323 | Restoration of GATA4 expression impedes breast cancer progression by transcriptional repression of ReLA and inhibition of NF-κB signaling. | 2019, 120, 917-927 | 10 |
| 322 | Effects of dietary oxidized fish oil on growth performance, antioxidant defense system, apoptosis and mitochondrial function of juvenile largemouth bass (Micropterus salmoides). | 2019, 500, 347-358 | 34 |
| 321 | The Critical Role of X Chromosome-Linked Inhibitor of Apoptosis (XIAP) in Differential Synergism Induced by Pentachlorophenol and Copper-1,10-Phenanthroline Complex in Normal and Cancer Liver Cells. | 2019, 168, 339-348 | 3 |
| 320 | Death receptor 5 is activated by fucosylation in colon cancer cells. | 2019, 286, 555-571 | 14 |
| 319 | Contacts in Death: The Role of the ER-Mitochondria Axis in Acetic Acid-Induced Apoptosis in Yeast. | 2019, 431, 273-288 | 6 |
| 318 | Low Molecular Weight Sulfated Chitosan: Neuroprotective Effect on Rotenone-Induced In Vitro Parkinson's Disease. | 2019, 35, 505-515 | 8 |
| 317 | Involvement of the Cholinergic Parameters and Glial Cells in Learning Delay Induced by Glutaric Acid: Protection by N-Acetylcysteine. | 2019, 56, 4945-4959 | 3 |
| 316 | Biosynthesis and characterization of copper oxide nanoparticles from indigenous fungi and its effect of photothermolysis on human lung carcinoma. | 2019, 190, 103-109 | 83 |
| 315 | Ethanol extract of Cordyceps cicadae exerts antitumor effect on human gastric cancer SGC-7901 cells by inducing apoptosis, cell cycle arrest and endoplasmic reticulum stress. | 2019, 231, 230-240 | 22 |
| 314 | Elevated H3K27me3 levels sensitize osteosarcoma to cisplatin. | 2019, 11, 8 | 28 |

| | | |
|-----|---|----|
| 313 | High maternal milk intake in the postnatal life reduces the incidence of breast cancer during adulthood in rats. 2019 , 10, 479-487 | 4 |
| 312 | Purification and characterization a polysaccharide from <i>Hedyotis diffusa</i> and its apoptosis inducing activity toward human lung cancer cell line A549. 2019 , 122, 64-71 | 26 |
| 311 | Programmed Necrosis and Disease:We interrupt your regular programming to bring you necroinflammation. 2019 , 26, 25-40 | 58 |
| 310 | Copper nanoparticles induced oxidation stress, cell apoptosis and immune response in the liver of juvenile <i>Takifugu fasciatus</i> . 2019 , 84, 648-655 | 38 |
| 309 | Novel metabolites from <i>Trichoderma atroviride</i> against human prostate cancer cells and their inhibitory effect on <i>Helicobacter pylori</i> and <i>Shigella</i> toxin producing <i>Escherichia coli</i> . 2019 , 126, 19-26 | 22 |
| 308 | Scutellarein from induces apoptosis of human colon cancer HCT116 cells through the ROS-mediated mitochondria-dependent pathway. 2019 , 33, 2372-2375 | 9 |
| 307 | Role of DIDO1 in Progression of Esophageal Squamous Cell Carcinoma. 2020 , 51, 83-87 | 2 |
| 306 | Theaflavic acid from black tea protects PC12 cells against ROS-mediated mitochondrial apoptosis induced by OGD/R via activating Nrf2/ARE signaling pathway. 2020 , 74, 238-246 | 17 |
| 305 | GSK-3 signaling is involved in proliferation of chicken primordial germ cells. 2020 , 141, 62-67 | 4 |
| 304 | Protective effects of hederagenic acid on PC12 cells against the OGD/R-induced apoptosis via activating Nrf2/ARE signaling pathway. 2020 , 29, 103-112 | 1 |
| 303 | Pyrrroloquinoline quinone protected autophagy-dependent apoptosis induced by mono(2-ethylhexyl) phthalate in INS-1 cells. 2020 , 39, 194-211 | 5 |
| 302 | Antiapoptotic Effect by PAR-1 Antagonist Protects Mouse Liver Against Ischemia-Reperfusion Injury. 2020 , 246, 568-583 | 3 |
| 301 | Detection of DNA damage in pigeon erythrocytes using a chromatin dispersion assay. 2020 , 30, 228-235 | 3 |
| 300 | Changes in apoptosis-like programmed cell death and viability during the cryopreservation of pollen from <i>Paeonia suffruticosa</i> . 2020 , 140, 357-368 | 8 |
| 299 | Pramipexole Inhibits MPP-Induced Neurotoxicity by miR-494-3p/BDNF. 2020 , 45, 268-277 | 12 |
| 298 | Restoring strategy of ethanolic extract of <i>Moringa oleifera</i> leaves against Tilmicosin-induced cardiac injury in rats: Targeting cell apoptosis-mediated pathways. 2020 , 730, 144272 | 18 |
| 297 | Fangchinoline derivatives induce cell cycle arrest and apoptosis in human leukemia cell lines via suppression of the PI3K/AKT and MAPK signaling pathway. 2020 , 186, 111898 | 15 |
| 296 | Synergistic Cytotoxicity Of Shikonin-Silver Nanoparticles As An Opportunity For Lung Cancer. 2020 , 63, 25-32 | 12 |

| | | |
|-----|---|----|
| 295 | NFAT2 overexpression suppresses the malignancy of hepatocellular carcinoma through inducing Egr2 expression. 2020 , 20, 966 | 4 |
| 294 | Ganoderic acid D induces synergistic autophagic cell death except for apoptosis in ESCC cells. 2020 , 262, 113213 | 6 |
| 293 | Triterpenoid Saponin AG8 from stapf. Induces Triple Negative Breast Cancer Cells Apoptosis through Oxidative Stress Pathway. 2020 , 2020, 7963212 | 5 |
| 292 | Hydroxypropyl-β-cyclodextrin causes massive damage to the developing auditory and vestibular system. 2020 , 396, 108073 | 10 |
| 291 | Identification and functional characterization of three caspases in Takifugu obscurus in response to bacterial infection. 2020 , 106, 252-262 | 4 |
| 290 | miR-378-3p maintains the size of mouse primordial follicle pool by regulating cell autophagy and apoptosis. 2020 , 11, 737 | 10 |
| 289 | Metal-Enhanced Fluorescence by Bifunctional Au Nanoparticles for Highly Sensitive and Simple Detection of Proteolytic Enzyme. 2020 , 20, 7100-7107 | 25 |
| 288 | Ferulic acid isolated from propolis inhibits porcine parvovirus replication potentially through Bid-mediate apoptosis. 2020 , 83, 106379 | 7 |
| 287 | Organophosphorus flame retardant TDCPP-induced cytotoxicity and associated mechanisms in normal human skin keratinocytes. 2020 , 726, 138526 | 6 |
| 286 | Comparison of the Toxicity Effects of Tris(1,3-dichloro-2-propyl)phosphate (TDCIPP) with Tributyl Phosphate (TNBP) Reveals the Mechanism of the Apoptosis Pathway in Asian Freshwater Clams (). 2020 , 54, 6850-6858 | 8 |
| 285 | Maintenance of Germinal Center B Cells by Caspase-9 through Promotion of Apoptosis and Inhibition of Necroptosis. 2020 , 205, 113-120 | 2 |
| 284 | Betulin inhibits mTOR and induces autophagy to promote apoptosis in human osteosarcoma cell lines. 2020 , 35, 879-887 | 6 |
| 283 | Caspase-8: The double-edged sword. 2020 , 1873, 188357 | 27 |
| 282 | Regulation of Necroptosis by Phospholipids and Sphingolipids. 2020 , 9, | 11 |
| 281 | Effects of dietary supplementation with exogenous catalase on growth performance, oxidative stress, and hepatic apoptosis in weaned piglets challenged with lipopolysaccharide. 2020 , 98, | 7 |
| 280 | Effect of intranasal instillation of Escherichia coli on apoptosis of spleen cells in diet-induced-obese mice. 2020 , 10, 5109 | 4 |
| 279 | Optimization of Experimental Variables Influencing Apoptosome Biosensor in HEK293T Cells. 2020 , 20, | 6 |
| 278 | Anti-Apoptotic Effects of Diosgenin in D-Galactose-Induced Aging Brain. 2020 , 48, 391-406 | 10 |

| | | |
|-----|--|----|
| 277 | Physiological renormalization using systems therapeutics. 2019 , 6, FSO428 | 6 |
| 276 | Phytochemical analysis and cytostatic potential of ethnopharmacological important medicinal plants. 2020 , 7, 443-452 | 27 |
| 275 | New manganese(II), iron(II), cobalt(II), nickel(II) and copper(II) saccharinate complexes of 2,6-bis(2-benzimidazolyl)pyridine as potential anticancer agents. 2020 , 202, 112535 | 23 |
| 274 | Copper-dependent biological effects of particulate matter produced by brake systems on lung alveolar cells. 2020 , 94, 2965-2979 | 5 |
| 273 | Chinese medicine Di-Huang-Yi-Zhi protects PC12 cells from HO-induced apoptosis by regulating ROS-ASK1-JNK/p38 MAPK signaling. 2020 , 20, 54 | 3 |
| 272 | An AMPK-caspase-6 axis controls liver damage in nonalcoholic steatohepatitis. 2020 , 367, 652-660 | 70 |
| 271 | The importance and future of biochemical engineering. 2020 , 117, 2305-2318 | 7 |
| 270 | Intracellular Photoactivation of Caspase-3 by Molecular Glues for Spatiotemporal Apoptosis Induction. 2020 , 142, 8080-8084 | 15 |
| 269 | Combination of Arsenic Trioxide and Valproic Acid Efficiently Inhibits Growth of Lung Cancer Cells via G2/M-Phase Arrest and Apoptotic Cell Death. 2020 , 21, | 6 |
| 268 | Selenium-Enriched Yeast Alleviates Oxidative Stress-Induced Intestinal Mucosa Disruption in Weaned Pigs. 2020 , 2020, 5490743 | 13 |
| 267 | Interaction Between Near-Infrared Radiation and Temozolomide in a Glioblastoma Multiform Cell Line: A Treatment Strategy?. 2021 , 41, 91-104 | 1 |
| 266 | Triorganotin complexes in cancer chemotherapy: Mechanistic insights and future perspectives. 2021 , 35, e6089 | 4 |
| 265 | Ionic liquid mediated synthesis and in vitro mechanistic exploration of polycyclic cage-like heterocyclic hybrid. 2021 , 58, 580-588 | 3 |
| 264 | Protocols in apoptosis identification and affirmation. 2021 , 127-152 | |
| 263 | A newly isolated strain of Haematococcus pluvialis JNU35 improves the growth, antioxidation, immunity and liver function of golden pompano (Trachinotus ovatus). 2021 , 27, 342-354 | 4 |
| 262 | Eldecalcitol induces apoptosis and autophagy in human osteosarcoma MG-63 cells by accumulating ROS to suppress the PI3K/Akt/mTOR signaling pathway. 2021 , 78, 109841 | 12 |
| 261 | pH-sensitive release of fungal metabolites from chitosan nanoparticles for effective cytotoxicity in prostate cancer (PC3) cells. 2021 , 102, 165-172 | 7 |
| 260 | 1-Bromopropane-induced apoptosis in OVCAR-3 cells via oxidative stress and inactivation of Nrf2. 2021 , 37, 59-67 | 1 |

| | | |
|-----|--|----|
| 259 | Carbamazepine at environmentally relevant concentrations caused DNA damage and apoptosis in the liver of Chinese rare minnows (<i>Gobiocypris rarus</i>) by the Ras/Raf/ERK/p53 signaling pathway. 2021 , 270, 116245 | 7 |
| 258 | Energetically significant cooperative stacked ternary assemblies in Ni(II) phenanthroline compounds involving discrete water clusters: Anticancer activities and theoretical studies. 2021 , 1229, 129486 | 12 |
| 257 | A review of fasting effects on the response of cancer to chemotherapy. 2021 , 40, 1669-1681 | 6 |
| 256 | Reactive oxygen species, thiols and enzymes activable AIEgens from single fluorescence imaging to multifunctional theranostics. 2021 , 427, 213559 | 26 |
| 255 | The role of vimentin, Connexin-43 proteins, and oxidative stress in the protective effect of propranolol against clozapine-induced myocarditis and apoptosis in rats. 2021 , 890, 173645 | 2 |
| 254 | Wikstromol from <i>Wikstroemia indica</i> induces apoptosis and suppresses migration of MDA-MB-231 cells via inhibiting PI3K/Akt pathway. 2021 , 75, 178-185 | 2 |
| 253 | A functional polymorphism of inhibin alpha subunit at miR-181b-1-3p-binding site regulates proliferation and apoptosis of chicken ovarian granular cells. 2021 , 384, 545-560 | 1 |
| 252 | Cyclophilin A inhibits A549 cell oxidative stress and apoptosis by modulating the PI3K/Akt/mTOR signaling pathway. 2021 , 41, | 7 |
| 251 | Bioorthogonal protein labelling enables the study of antigen processing of citrullinated and carbamylated auto-antigens. 2021 , 2, 855-862 | 2 |
| 250 | The anti-breast cancer property of physcion via oxidative stress-mediated mitochondrial apoptosis and immune response. 2021 , 59, 303-310 | 1 |
| 249 | References. 2021 , 603-645 | |
| 248 | Induction of apoptosis and suppression of Ras gene expression in MCF human breast cancer cells. 2021 , | |
| 247 | Responses in growth performance, enzymatic activity, immune function and liver health after dietary supplementation of <i>Porphyridium</i> sp. in juvenile golden pompano (<i>Trachinotus ovatus</i>). 2021 , 27, 679-690 | 2 |
| 246 | Apoptosis of Hepatocytes: Relevance for HIV-Infected Patients under Treatment. 2021 , 10, | 1 |
| 245 | Inhibits the Non-Small Cell Lung Cancer via Bax/Bcl-2/Caspase-9/Caspase-3 Pathway. 2021 , 1-13 | 3 |
| 244 | Mitochondrial Fission Protein 1: Emerging Roles in Organellar Form and Function in Health and Disease. 2021 , 12, 660095 | 14 |
| 243 | Oxidative stress-mediated induction of pulmonary oncogenes, inflammatory, and apoptotic markers following time-course exposure to ethylene glycol monomethyl ether in rats. 2021 , 9, 100075 | 3 |
| 242 | lncRNA APOC1P1-3 promoting anoikis-resistance of breast cancer cells. 2021 , 21, 232 | 3 |

| | | |
|-----|---|----|
| 241 | DNase II mediates a parthanatos-like developmental cell death pathway in <i>Drosophila</i> primordial germ cells. 2021 , 12, 2285 | 3 |
| 240 | Hesperidin alleviates bupivacaine anesthesia-induced neurotoxicity in SH-SY5Y cells by regulating apoptosis and oxidative damage. 2021 , 35, e22787 | 3 |
| 239 | A novel and distinctive mode of cell death revealed by using non-thermal atmospheric pressure plasma: The involvements of reactive oxygen species and the translation inhibitor Pdcd4. 2021 , 338, 109403 | 2 |
| 238 | Tebuconazole induced cytotoxic and genotoxic effects in HCT116 cells through ROS generation. 2021 , 174, 104797 | 3 |
| 237 | Death Processes in Bovine Theca and Granulosa Cells Modelled and Analysed Using a Systems Biology Approach. 2021 , 22, | 1 |
| 236 | Indole-3-carbinol inhibits the proliferation of colorectal carcinoma LoVo cells through activation of the apoptotic signaling pathway. 2021 , 40, 2099-2112 | 1 |
| 235 | The metabolite 5-methyl-1,3-benzenediol and its derivative methyl-2,4-dihydroxy-6-methylbenzoate from the lichen with potent apoptotic and anti-angiogenesis effects. 2021 , 11, 346 | 0 |
| 234 | Ethanol Extract of Fruit Protects SH-SY5Y Neuroblastoma Cells against HO-Induced Oxidative Damage via Inhibiting MAPK and NF- κ B Signaling. 2021 , 22, | 3 |
| 233 | Effects of dietary curcumin inhibit deltamethrin-induced oxidative stress, inflammation and cell apoptosis in <i>Channa argus</i> via Nrf2 and NF- κ B signaling pathways. 2021 , 540, 736744 | 11 |
| 232 | The Role of Apoptosis Pathway in the Cytotoxicity Induced by Fresh and Aged Zinc Oxide Nanoparticles. 2021 , 16, 129 | 0 |
| 231 | Evaluation of cytotoxicity and potential toxicity of the extract from cultivated <i>Lindl.</i> 2021 , 84, 987-1003 | 1 |
| 230 | Apoptosis-promoting properties of miR-3074-5p in MC3T3-E1 cells under iron overload conditions. 2021 , 26, 37 | 3 |
| 229 | Trigoxyphin L Induces Apoptosis of Human Retinoblastoma Y99 Cells via PI3K/AKT/NF- κ B Pathway. 2021 , 17, 420-427 | |
| 228 | Cell death modulation by transient receptor potential melastatin channels TRPM2 and TRPM7 and their underlying molecular mechanisms. 2021 , 190, 114664 | 4 |
| 227 | Effect of gallic acid on the reproduction of adolescent male Brandt's voles (<i>Lasiopodomys brandtii</i>). 2021 , 99, 783-791 | |
| 226 | Oxidative stress biomarkers, physiological responses and proteomic profiling in oyster (<i>Crassostrea gigas</i>) exposed to microplastics with irregular-shaped PE and PET microplastic. 2021 , 786, 147425 | 6 |
| 225 | Targeted biallelic integration of an inducible Caspase 9 suicide gene for safer cellular therapies prevents development of drug-resistant escapees in human iPSCs. | |
| 224 | The role of apoptosis in cryopreserved animal oocytes and embryos. 2021 , 173, 93-101 | 2 |

| | | |
|-----|--|----|
| 223 | Effect of Akt activation on apoptosis-related gene expression in the crop tissues of male and female pigeons (<i>Columba livia</i>). 2021 , 100, 101392 | 0 |
| 222 | Discrepancy of apoptotic events in mouse hepatocytes and catalase performance: Size-dependent cellular and molecular toxicity of ultrafine carbon black. 2022 , 421, 126781 | 2 |
| 221 | Senescence and Apoptosis: Architects of Mammalian Development. 2020 , 8, 620089 | 7 |
| 220 | A novel prognostic factor TIPE2 inhibits cell proliferation and promotes apoptosis in pancreatic ductal adenocarcinoma (PDAC). 2021 , 18, 2051-2062 | 1 |
| 219 | Novel approaches for chemosensitization of breast cancer cells: the E1A story. 2007 , 608, 144-69 | 17 |
| 218 | Taurine protects immature cerebellar granular neurons against acute alcohol administration. 2009 , 643, 159-67 | 10 |
| 217 | Noncanonical functions of BCL-2 proteins in the nervous system. 2010 , 687, 115-29 | 6 |
| 216 | Taurine enhances anticancer activity of cisplatin in human cervical cancer cells. 2013 , 776, 189-98 | 17 |
| 215 | Resistance To Taxanes. 2006 , 329-358 | 9 |
| 214 | Detection of apoptosis using cyclic luciferase in living mammals. 2009 , 574, 105-14 | 15 |
| 213 | Programmed death in eye development. 2002 , 37, 169-89 | 2 |
| 212 | Induction of transformed cell-specific apoptosis by the adenovirus E4orf4 protein. 2004 , 36, 245-67 | 10 |
| 211 | Human melanoma: drug resistance. 2003 , 161, 93-110 | 17 |
| 210 | Compartmentalization of Proteolysis. 2013 , 85-125 | 7 |
| 209 | Cellular and Molecular Mechanism of Ganoderma (Lingzhi) Against Tumor. 2019 , 1182, 79-118 | 2 |
| 208 | Integration of Evolutionary Theory into Cancer Biology and Caspase Signaling. 2019 , 131-155 | 1 |
| 207 | Apostosis Signaling: A Means to an End. 2003 , 431-439 | 1 |
| 206 | Cerebral Blood Flow and Metabolism and Cerebral Ischemia. 2011 , 3537-3562 | 2 |

| | | |
|-----|--|-----|
| 205 | Nicotinamide induces mitochondrial-mediated apoptosis through oxidative stress in human cervical cancer HeLa cells. 2017 , 181, 62-69 | 15 |
| 204 | The multikinase inhibitor sorafenib induces caspase-dependent apoptosis in PC-3 prostate cancer cells. 2010 , 12, 527-34 | 12 |
| 203 | Pre-processed caspase-9 contained in mitochondria participates in apoptosis. | 1 |
| 202 | HMG-CoA reductase inhibitors and the malignant cell: the statin family of drugs as triggers of tumor-specific apoptosis. | 2 |
| 201 | Zn(ii), Cd(ii) and Hg(ii) saccharinate complexes with 2,6-bis(2-benzimidazolyl)pyridine as promising anticancer agents in breast and lung cancer cell lines via ROS-induced apoptosis. 2020 , 49, 7842-7851 | 8 |
| 200 | Catalpol protects rat ovarian granulosa cells against oxidative stress and apoptosis through modulating the PI3K/Akt/mTOR signaling pathway. 2020 , 40, | 8 |
| 199 | Functional divergence in the caspase gene family and altered functional constraints: statistical analysis and prediction. 2001 , 158, 1311-20 | 93 |
| 198 | Mitochondrial Markers in Aging and Primary Open-Angle Glaucoma. 2020 , 29, 295-303 | 5 |
| 197 | Implication of caspases during maedi-visna virus-induced apoptosis. 2002 , 83, 3153-3161 | 22 |
| 196 | The enteropathogenic Escherichia coli effector NleH inhibits apoptosis induced by Clostridium difficile toxin B. 2010 , 156, 1815-1823 | 25 |
| 195 | Human immunodeficiency virus type 1 Vpr: functions and molecular interactions. 2009 , 90, 1795-1805 | 39 |
| 194 | Evaluation of anticancer and anti-mitotic properties of quinazoline and quinazolino-benzothiadiazine derivatives. | 2 |
| 193 | The flower pot method of REM sleep deprivation causes apoptotic cell death in the hepatocytes of rat. | 2 |
| 192 | Bioorthogonal antigens allow the unbiased study of antigen processing and presentation. | 1 |
| 191 | Cigarette smoke prevents apoptosis through inhibition of caspase activation and induces necrosis. 2003 , 29, 562-70 | 99 |
| 190 | Apoptosis and NF- κ B: the FADD connection. 2002 , 109, 579-580 | 22 |
| 189 | PDX-1 haploinsufficiency limits the compensatory islet hyperplasia that occurs in response to insulin resistance. 2004 , 114, 828-36 | 212 |
| 188 | Reawakening the cellular death program in neoplasia through the therapeutic blockade of IAP function. 2005 , 115, 2673-8 | 89 |

| | | |
|-----|--|-----|
| 187 | Critical roles of Bim in T cell activation and T cell-mediated autoimmune inflammation in mice. 2009 , 119, 1706-13 | 41 |
| 186 | Proteinase 3-dependent caspase-3 cleavage modulates neutrophil death and inflammation. 2014 , 124, 4445-58 | 79 |
| 185 | Evaluation of Apaf-1 and procaspases-2, -3, -7, -8, and -9 as potential prognostic markers in acute leukemia. 2000 , 96, 3922-3931 | 5 |
| 184 | Role of mesenchymal stem cells and their culture medium in alleviating kidney injury in rats diabetic nephropathy. 2020 , 21, | 2 |
| 183 | Role of the Mevalonate Pathway in Tocotrienol-Mediated Tumor Suppression. 2008 , 185-207 | 2 |
| 182 | A pathway of signals regulating effector and initiator caspases in the developing Drosophila eye. 2002 , 129, 3269-3278 | 136 |
| 181 | Inhibition of host cell apoptosis by Toxoplasma gondii is accompanied by reduced activation of the caspase cascade and alterations of poly(ADP-ribose) polymerase expression. 2001 , 114, 3495-3505 | 101 |
| 180 | Use of a Systematic Pharmacological Methodology to Explore the Mechanism of Shengmai Powder in Treating Diabetic Cardiomyopathy. 2020 , 26, e919029 | 3 |
| 179 | Excessive food intake, obesity and inflammation process in Zucker fa/fa rat pancreatic islets. 2011 , 6, e22954 | 23 |
| 178 | Uterine endoplasmic reticulum stress and its unfolded protein response may regulate caspase 3 activation in the pregnant mouse uterus. 2013 , 8, e75152 | 23 |
| 177 | Possible protective effect of membrane lipid rafts against interleukin-1 β -mediated anti-proliferative effect in INS-1 cells. 2014 , 9, e102889 | 2 |
| 176 | Mangiferin attenuates diabetic nephropathy by inhibiting oxidative stress mediated signaling cascade, TNF α -related and mitochondrial dependent apoptotic pathways in streptozotocin-induced diabetic rats. 2014 , 9, e107220 | 114 |
| 175 | HIV-1 subtype C unproductively infects human cardiomyocytes in vitro and induces apoptosis mitigated by an anti-Gp120 aptamer. 2014 , 9, e110930 | 15 |
| 174 | Iridovirus CARD Protein Inhibits Apoptosis through Intrinsic and Extrinsic Pathways. 2015 , 10, e0129071 | 8 |
| 173 | TAT Modification of Alpha-Helical Anticancer Peptides to Improve Specificity and Efficacy. 2015 , 10, e0138911 | 28 |
| 172 | Novel Biomarker Proteins in Chronic Lymphocytic Leukemia: Impact on Diagnosis, Prognosis and Treatment. 2016 , 11, e0148500 | 6 |
| 171 | Hsp70 mutant proteins modulate additional apoptotic pathways and improve cell survival. 2004 , 9, 229-42 | 21 |
| 170 | Chemopreventive and Anticancer Activities of Allium victorialis var. platyphyllum Extracts. 2014 , 19, 179-86 | 3 |

| | | |
|-----|---|----|
| 169 | Apoptosis and its Role in Parkinson's Disease. 65-82 | 19 |
| 168 | A Biotechnological Approach to Apoptosis in Living Organisms: An Overview. 2013 , 1, 282-298 | 2 |
| 167 | Antineoplastic effects of CPPTL via the ROS/JNK pathway in acute myeloid leukemia. 2017 , 8, 38990-39000 | 5 |
| 166 | Activation of the Nrf2/ARE signaling pathway by probucol contributes to inhibiting inflammation and neuronal apoptosis after spinal cord injury. 2017 , 8, 52078-52093 | 31 |
| 165 | Lipopolysaccharide-coated CuS nanoparticles promoted anti-cancer and anti-metastatic effect by immuno-photothermal therapy. 2017 , 8, 105584-105595 | 15 |
| 164 | Regulation of sensitivity of tumor cells to antitubulin drugs by Cdk1-TAZ signalling. 2015 , 6, 21906-17 | 21 |
| 163 | G protein-coupled receptor GPR160 is associated with apoptosis and cell cycle arrest of prostate cancer cells. 2016 , 7, 12823-39 | 15 |
| 162 | MicroRNA-related polymorphisms in apoptosis pathway genes are predictive of clinical outcome in patients with limited disease small cell lung cancer. 2016 , 7, 22632-8 | 3 |
| 161 | Ecliptasaponin A induces apoptosis through the activation of ASK1/JNK pathway and autophagy in human lung cancer cells. 2019 , 7, 539 | 13 |
| 160 | Evaluation of Anticancer and Anti-Mitotic Properties of Quinazoline and Quinazolino-Benzothiadiazine Derivatives. 2020 , 20, 599-611 | 2 |
| 159 | Effects of Caspase 9 Gene Polymorphism in Patients with Prostate Cancer. 2017 , 31, 205-208 | 4 |
| 158 | Heat-induced Signal Transduction Pathways Leading to Cell Death and Cell Survival in Cancer Cells. 2009 , 25, 1-11 | 1 |
| 157 | [Pro-apoptotic function of hepatitis B virus X protein]. 2010 , 16, 112-22 | 2 |
| 156 | In-Jin-Ho-Tang as a potential anti-cancer drug by induction of apoptosis in HepG2 cells. 2009 , 9, 106-114 | 1 |
| 155 | A Study on the Mechanisms by Which the Aqueous Extract of Inonotus obliquus Induces Apoptosis and Inhibits Proliferation in HT-29 Human Colon Cancer Cells. 2006 , 35, 516-523 | 13 |
| 154 | Inhibitory Effect of the Methanolic Extract of Symphyocladia latiuscula on the Growth of HT-29 Human Colon Cancer Cells. 2007 , 36, 431-438 | 11 |
| 153 | Inhibitory Effect of the Hexane Extract of Saussurea lappa on the Growth of LNCaP Human Prostate Cancer Cells. 2008 , 37, 8-15 | 6 |
| 152 | Induction of Apoptosis in HT-29 Human Colon Cancer Cells by the Pepper Component Piperine. 2009 , 38, 442-450 | 4 |

| | | |
|-----|--|----|
| 151 | Relaxin prevents the development of severe acute pancreatitis. 2006 , 12, 1558-68 | 27 |
| 150 | Effects of Terminalia arjuna bark extract on apoptosis of human hepatoma cell line HepG2. 2006 , 12, 1018-24 | 35 |
| 149 | Glucocorticoid receptor regulates expression of microRNA-22 and downstream signaling pathway in apoptosis of pancreatic acinar cells. 2018 , 24, 5120-5130 | 9 |
| 148 | Crocin protects against fulminant hepatic failure induced by lipopolysaccharide/D-galactosamine by decreasing apoptosis, inflammation and oxidative stress in a rat model. 2019 , 18, 3775-3782 | 7 |
| 147 | Pancreatic cancer cell apoptosis is induced by a proteoglycan extracted from. 2021 , 21, 34 | 3 |
| 146 | Proliferative Inhibition and Apoptotic Mechanism on Human Non-small-cell Lung Cancer (A549 Cells) of a Novel Cucurbitacin from Wilbrandia ebracteata Cogn. 2013 , 9, 54-68 | 5 |
| 145 | Tao-Hong Si-Wu Decoction Alleviates Cerebral Ischemic Damage in Rats by Improving Anti-oxidant and Inhibiting Apoptosis Pathway. 2020 , 16, 214-222 | 1 |
| 144 | Probing the Mechanism of Cytotoxic Furan 2-YL Acetate Using in vitro and in silico Analysis-pharmacological Study. 2012 , 8, 1-18 | 3 |
| 143 | Growth inhibitory effects of crude pomegranate peel extract on chronic myeloid leukemia, K562 cells. 2015 , 5, 100-5 | 19 |
| 142 | Caspase cascade pathways of apoptosis in oral pemphigus: An immunohistochemical study. 2018 , 22, 48-53 | 2 |
| 141 | Prognostic Impact of Polymorphisms in the CASPASE Genes on Survival of Patients with Colorectal Cancer. 2012 , 44, 32-6 | 13 |
| 140 | Current Concepts in the Biochemical Mechanisms of Glaucomatous Neurodegeneration. 2013 , 7, 49-53 | 10 |
| 139 | Downregulation of bcl-xL is relevant to UV-induced apoptosis in fibroblasts. 2002 , 35, 452-8 | 8 |
| 138 | Apoptosis Induced by Manganese on Neuronal SK-N-MC Cell Line: Endoplasmic Reticulum (ER) Stress and Mitochondria Dysfunction. 2011 , 26, e2011017 | 54 |
| 137 | Vitamin E modulates cigarette smoke extract-induced cell apoptosis in mouse embryonic cells. 2011 , 7, 927-36 | 12 |
| 136 | Apoptosis in cancer--an update. 2012 , 13, 4873-8 | 68 |
| 135 | Association between the FAS/FASL polymorphisms and gastric cancer risk: a meta-analysis. 2012 , 13, 945-51 | 9 |
| 134 | Atomic structures of fibrillar segments of hIAPP suggest tightly mated β sheets are important for cytotoxicity. 2017 , 6, | 76 |

- 133 Effects of dietary lipid sources on apoptotic and immune gene expression in head kidney of olive flounder (*Paralichthys olivaceus*). **2012**, 25, 199-210 3
- 132 Evaluation of Caspase-3 and Ki-67 expression in squamous cell hyperplasia of the stomach induced by water extract in Sprague-Dawley rats.. **2022**, 35, 45-52 0
- 131 Antileishmanial Activity of Leaves Extract and Its Possible Cellular Mechanisms. **2021**, 9, 3
- 130 Fusion of apoptosis-related protein Cytochrome c with anti-HER-2 single-chain antibody targets the suppression of HER-2+ breast cancer. **2021**, 25, 10638-10649 3
- 129 Plasmalogens and Chronic Inflammatory Diseases. **2021**, 12, 730829 12
- 128 Copper in tumors and the use of copper-based compounds in cancer treatment. **2022**, 226, 111634 7
- 127 Thermal stress induces pyknosis in pigeon erythrocytes: digital image analysis. **2021**, 26, 726-731
- 126 Dietary Fipoic acid can alleviate the bioaccumulation, oxidative stress, cell apoptosis, and inflammation induced by lead (Pb) in *Channa argus*. **2021**, 119, 249-261 7
- 125 Apoptosis in Heart Failure Reversible. **2000**, 115-133
- 124 Death Receptors in Acute Brain Injury. **2001**, 181-198
- 123 Mitochondrial Membrane Permeabilization in Physiological and Pathological Cell Death. **2001**, 15-26
- 122 Bcl-2 Family Members and Permeabilization of the Outer Mitochondrial Membrane. **2001**, 27-32
- 121 Partial rescue of neural apoptosis in the Lurcher mutant mouse through elimination of tissue plasminogen activator. **2002**, 129, 2043-2050 24
- 120 Cell Death (Apoptosis). **2003**, 541-554
- 119 Cell Death in Mammalian Development. **2003**, 163-175
- 118 DNA Fragmentation in Mammalian Apoptosis and Tissue Homeostasis. **2003**, 171-183
- 117 Programmed Cell Death. Apoptosis in Focal Brain Ischemia. **2003**, 183-205
- 116 The Mechanism of Apoptosis Regulation by IAP Antagonist Smac/DIABLO. **2003**, 195-211

- 115 Apoptosis. **2003**, 83-106
- 114 Enhancement of Radiation Response with TNF/TRAIL. **2003**, 227-240
- 113 Toxicogenomic Dissection of the Antioxidant Response. **2003**,
- 112 Mechanisms of HIV-Infected vs. Uninfected T Cell Killing. **2005**, 207-228
- 111 Involvement of caspase-8 and -9 in apoptosis in macrophages infected with *Actinobacillus actinomycetemcomitans* through caspase-3 activation. **2006**, 60, 124-135
- 110 Intracellular Pathways of Neuronal Death. **2006**, 91-103
- 109 Effect of [6]-Gingerol on Bcl-2 and Bax Expression in MDA-MB-231 Human Breast Cancer Cell Line. **2006**, 35, 671-676 2
- 108 Proteomics and Genomics Technology: Comparison in Heart Failure and Apoptosis.
- 107 Molecular and Genetic Events in Neoplastic Transformation. **2006**, 47-64
- 106 Caspase 8. **2007**, 1-7
- 105 Induction of Apoptosis by Vitamin E Succinate in Human Erythroleukemia K562 Cells. **2007**, 17, 896-904
- 104 Apoptosis in Human Acute Myocardial Infarction: The Rationale for Clinical Trials of Apoptosis Inhibition in Acute Myocardial Infarction. **2009**, 2009, 1-10 0
- 103 DNA Damage Response and the Balance Between Cell Survival and Cell Death. **2010**, 95-108
- 102 Radiobiologic Principles. **2010**, 3-30
- 101 Effects of Green Pepper (*Capsicum annuum* var.) on Antioxidant Activity and Induction of Apoptosis in Human Breast Cancer Cell Lines. **2012**, 44, 750-758 6
- 100 Apoptosis and Male Infertility. **2013**, 217-229
- 99 IAP Proteins and Their Therapeutic Potential. **2014**, 97-119
- 98 Targeting Mitochondria During CPR. **2014**, 129-142

- 97 Self-Repair. **2014**, 189-197
- 96 Expression of Bax in Oral Lichen Planus [An Immunohistochemical Study. **2014**, 4, 3-8
- 95 In vitro Anticancer Effect of Acanthus ilicifolius on Hepatocellular Carcinoma Cells. **2014**, 9, 179-186 1
- 94 Extract from Eucheuma cottonii Induces Apoptotic Cell Death on Human Osteosarcoma Saos-2 Cells via Caspase Cascade Apoptosis Pathway. **2016**, 26, 147-154
- 93 Ethanol Extract from Asparagus Cochinchinensis Attenuates Glutamate-Induced Oxidative Toxicity in HT22 Hippocampal Cells. **2016**, 26, 1458-1465 0
- 92 Current perspective on the role of TNF inhibitors in treating patients with toxic epidermal necrolysis. **2016**, 30, 24-27
- 91 Monitoring Apoptosis and Anticancer Drug Activity in Single Cells Using Nanosensors. **2017**, 423-438
- 90 Treatment of Donor Rat Hearts Prior to Transplantation with FLIP (FADD-Like Interleukin Beta-Converting Enzyme (FLICE)-Like Inhibitory Protein) in Cardioplegic Solution Decreased Apoptosis at Thirty Minutes Post-transplantation and Decreased Total Tyrosine Phosphorylation Levels. **2018**, 23, 144-152 0
- 89 Tekrarlayan gebelik kayıplarında FAS ve FASLG polimorfizmlerinin TaqMan SNP genotiplendirme yöntemi ile belirlenmesi. **2019**, 44, 1303-1309
- 88 Carissa edulis and Gmelina arborea Reduce Cell Viability and Prevent Apoptosis in CaCO-2 and Hep-G2 Cells. **2020**, 14, 156-166
- 87 Surviving death: emerging concepts of RIPK3 and MLKL ubiquitination in the regulation of necroptosis. **2021**, 1
- 86 Apoptosis and Male Infertility. **2020**, 479-486 1
- 85 Molecular mechanism of shikonin inhibiting tumor growth and potential application in cancer treatment.. **2021**, 10, 1077-1084 1
- 84 Bioactive chemical constituents, in vitro anti-proliferative activity and in vivo toxicity of the extract of Curcuma singularis Gagnep rhizomes. **2022**, 284, 114803 3
- 83 Mechanisms of apoptosis repression. **2001**, 23, 11-33
- 82 Molecular Aspects of Brain Ischemia in Mammals. **2003**, 103-118
- 81 Dysfunction of the Apoptotic Pathway in Cancer Cells. **2005**, 1-28
- 80 Apoptosis Induction By Tumor- Targeted Toxins. **2005**, 179-187

| | | |
|----|---|----|
| 79 | Apoptosis and NF-kappa B: the FADD connection. 2002 , 109, 579-80 | 9 |
| 78 | Lung Cancer. 2006 , 736-742 | 1 |
| 77 | Methods of Determining Apoptosis in Neuro-Oncology. 2006 , 143-161 | |
| 76 | Evaluating the Importance of Apoptosis and Other Determinants of Cell Death and Survival. 2007 , 55-72 | |
| 75 | SİN hipokampüsünde izofluran, ketamin ve dantrolenin apoptozis üzerine etkileri. | |
| 74 | Down-regulation of uPAR and uPA activates caspase-mediated apoptosis and inhibits the PI3K/AKT pathway. 2007 , 31, 19-27 | 46 |
| 73 | Cross-talk in cell death signaling. 2000 , 192, F21-5 | 37 |
| 72 | Elevated hydrostatic pressure triggers release of OPA1 and cytochrome C, and induces apoptotic cell death in differentiated RGC-5 cells. 2009 , 15, 120-34 | 60 |
| 71 | Silencing receptor EphA2 induces apoptosis and attenuates tumor growth in malignant mesothelioma. 2011 , 1, 419-431 | 14 |
| 70 | Caspase-mediated apoptosis in sensory neurons of cultured dorsal root Ganglia in adult mouse. 2013 , 15, 212-7 | 6 |
| 69 | Relation of cumulus cell status with single oocyte maturity, fertilization capability and patient age. 2014 , 15, 15-21 | 10 |
| 68 | Extracellular Caspase-8 Dependent Apoptosis on HeLa Cancer Cells and MRC-5 Normal Cells by ICD-85 (Venom Derived Peptides). 2012 , 5, 194-202 | 4 |
| 67 | Arachidonic acid attenuates learning and memory dysfunction induced by repeated isoflurane anesthesia in rats. 2015 , 8, 12365-73 | 11 |
| 66 | Separation of glycine-rich proteins from sea hare eggs and their anti-cancer activity against U937 leukemia cell line. 2016 , 15, 329-42 | 2 |
| 65 | Overexpression and biological function of IQGAP3 in human pancreatic cancer. 2016 , 8, 5421-5432 | 22 |
| 64 | Perfluorooctanoic acid exposure during pregnancy alters the apoptosis of uterine cells in pregnant mice. 2018 , 11, 5602-5611 | 2 |
| 63 | Salidroside alleviates oxidative stress and apoptosis via AMPK/Nrf2 pathway in DHT-induced human granulosa cell line KGN. 2021 , 715, 109094 | 2 |
| 62 | from Gene Function in Development and Physiology to Dosage Correction across Life Span in Down Syndrome. 2021 , 12, | 2 |

| | | |
|----|--|----|
| 61 | Dietary supplementation of fructooligosaccharides alleviates enterotoxigenic -induced disruption of intestinal epithelium in a weaned piglet model. 2021 , 1-27 | 0 |
| 60 | Roles of apoptosis and autophagy in natural rabies infections. 2021 , 67, 1-12 | 1 |
| 59 | AMBRA1 promotes apoptosis induced by dsRNA and virus through interacting with and stabilizing MAVS. 2021 , | |
| 58 | usEP Induce Regulated Cell Death Mechanisms. 2021 , 227-263 | |
| 57 | Model Rate Equation Evaluation of an Extrinsic Apoptotic Pathway. 2021 , 265-274 | |
| 56 | Anticancer Applications and Pharmacological Properties of Piperidine and Piperine: A Comprehensive Review on Molecular Mechanisms and Therapeutic Perspectives.. 2021 , 12, 772418 | 3 |
| 55 | HDAC inhibitors: Targets for tumor therapy, immune modulation and lung diseases.. 2021 , 16, 101312 | 4 |
| 54 | Design, synthesis and evaluation of structurally diverse ortho-acylphenol-diindolylmethane hybrids as anticancer agents. 2022 , 46, 1295-1307 | 1 |
| 53 | Role of caspase-8 and/or -9 as biomarkers that can distinguish the potential to cause toxic- and immune related-adverse event, for the progress of acetaminophen-induced liver injury.. 2022 , 294, 120351 | 2 |
| 52 | The role of phosphatidylserine on the membrane in immunity and blood coagulation.. 2022 , 10, 4 | 2 |
| 51 | Antiparasitic effects of L. essential oil and its main compounds, 1-8 Cineole alone and in combination with albendazole against protoscoleces.. 2022 , 29, 2811-2818 | 2 |
| 50 | Dietary l-carnitine supplementation recovers the increased pH and hardness in fillets caused by high-fat diet in Nile tilapia (<i>Oreochromis niloticus</i>).. 2022 , 382, 132367 | 1 |
| 49 | Cross-talk in cell death signaling. 2000 , 192, 21-6 | 15 |
| 48 | Effects of heparan sulfate from porcine mucosa on Aβ-induced neurotoxicity in vitro and in vivo.. 2022 , 206, 823-836 | |
| 47 | Syringic and ascorbic acids prevent NDMA-induced pulmonary fibrogenesis, inflammation, apoptosis, and oxidative stress through the regulation of PI3K-Akt/PKB-mTOR-PTEN signaling pathway.. 2022 , 14, 100179 | 1 |
| 46 | Soybean β-conglycinin and glycinin reduced growth performance and the intestinal immune defense and altered microbiome in juvenile pearl gentian groupers <i>Epinephelus fuscoguttatus</i> ? <i>Epinephelus lanceolatus</i> ?. 2021 , | 0 |
| 45 | An in vitro approach to combat multidrug resistance in <i>Salmonella typhi</i> and human colon cancer with <i>Excoecaria agallocha</i> L. extract. 2021 , 45, | |
| 44 | Effective topical treatments of innovative NNO-tridentate vanadium (IV) complexes-mediated photodynamic therapy in psoriasis-like mice model. | 0 |

| | | |
|----|---|----|
| 43 | MAPK/MAK/MRK overlapping kinase mediated apoptosis through caspase signaling pathway from <i>Cristaria plicata</i> . 2022 , 104427 | |
| 42 | Image_1.TIF. 2019 , | |
| 41 | Image_2.tif. 2019 , | |
| 40 | Cadmium-induced apoptosis and necrosis in human osteoblasts: role of caspases and mitogen-activated protein kinases pathways. 2012 , 35, 198-208 | 16 |
| 39 | Targeted biallelic integration of an inducible Caspase 9 suicide gene in iPSCs for safer therapies. 2022 , | 1 |
| 38 | Pentoxifylline induces caspase-dependent apoptosis in colorectal cancer cells. 2022 , 31, 100997 | |
| 37 | Ellagic acid effects on testis, sex hormones, oxidative stress, and apoptosis in the relative sterility rat model following busulfan administration. 2022 , 22, | |
| 36 | Anticancer activity of linalool: comparative investigation of ultrastructural changes and apoptosis in breast cancer cells. 1-11 | 1 |
| 35 | A Mutation in the SDHC Gene of Complex II Increases Oxidative Stress, Resulting in Apoptosis and Tumorigenesis. 2005 , 65, 203-209 | 77 |
| 34 | Fancd2os Reduces Testosterone Production by Inhibiting Steroidogenic Enzymes and Promoting Cellular Apoptosis in Murine Testicular Leydig Cells. 2022 , 37, 533-546 | |
| 33 | High-throughput screening identifies stevioside as a potent agent to induce apoptosis in bladder cancer cells. 2022 , 115166 | 0 |
| 32 | Mitochondrial Stress Responses in Duchenne muscular dystrophy: Metabolic Dysfunction or Adaptive Reprogramming?. | 1 |
| 31 | Molecular Pathways and Key Genes Associated With Breast Width and Protein Content in White Striping and Wooden Breast Chicken Pectoral Muscle. 13, | |
| 30 | Proteasome-mediated degradation of cell division cycle 25C and cyclin-dependent kinase 1 in phenethyl isothiocyanate-induced G2-M-phase cell cycle arrest in PC-3 human prostate cancer cells. 2004 , 3, 567-576 | 27 |
| 29 | Selenite-induced p53 Ser-15 phosphorylation and caspase-mediated apoptosis in LNCaP human prostate cancer cells. 2004 , 3, 877-884 | 21 |
| 28 | Transcriptomic Analysis of the Liver and Brain in Grass Carp (<i>Ctenopharyngodon idella</i>) Under Heat Stress. | 2 |
| 27 | Anti-Cancer Effects of Auranofin in Human Lung Cancer Cells by Increasing Intracellular ROS Levels and Depleting GSH Levels. 2022 , 27, 5207 | 2 |
| 26 | Response of human gingival keratinocytes to hybrid CAD/CAM material eluates. 2022 , 38, 1532-1546 | |

| | | |
|----|---|---|
| 25 | Dietary aflatoxin B1 caused the growth inhibition, and activated oxidative stress and endoplasmic reticulum stress pathway, inducing apoptosis and inflammation in the liver of northern snakehead (<i>Channa argus</i>). 2022 , 850, 157997 | 2 |
| 24 | Expression Changes in Mitochondrial Genes Affecting Mitochondrial Morphology, Transmembrane Potential, Fragmentation, Amyloidosis, and Neuronal Cell Death Found in Brains of Alzheimer's Disease Patients. 2022 , 1-19 | 0 |
| 23 | chi-miR-99b-3p Regulates the Proliferation of Goat Skeletal Muscle Satellite Cells In Vitro by Targeting Caspase-3 and NCOR1. 2022 , 12, 2368 | 0 |
| 22 | Biologically synthesized black ginger-selenium nanoparticle induces apoptosis and autophagy of AGS gastric cancer cells by suppressing the PI3K/Akt/mTOR signaling pathway. 2022 , 20, | 1 |
| 21 | Tempol Inhibits the Growth of Lung Cancer and Normal Cells through Apoptosis Accompanied by Increased O ₂ Levels and Glutathione Depletion. 2022 , 27, 7341 | 1 |
| 20 | Diosmetin alleviates nonylphenol-induced liver damage by improving biochemical, inflammatory, apoptotic and histological profile in rats. 2023 , 35, 102392 | 0 |
| 19 | Drug Delivery to the Brain: Targeting Technologies to Deliver Therapeutics to Brain Lesions. 2022 , 389-424 | 0 |
| 18 | Lidocaine Induces Apoptosis in Head and Neck Squamous Cell Carcinoma Cells Through Activation of Bitter Taste Receptor T2R14. | 0 |
| 17 | The Biological Roles and Molecular Mechanisms of Long Non-Coding RNA MEG3 in the Hallmarks of Cancer. 2022 , 14, 6032 | 1 |
| 16 | Structural basis for BIRC6 to balance apoptosis and autophagy. | 0 |
| 15 | Naturally Isolated Sesquiterpene Lactone and Hydroxyanthraquinone Induce Apoptosis in Oral Squamous Cell Carcinoma Cell Line. 2023 , 15, 557 | 1 |
| 14 | <i>Asterarcys quadricellulare</i> (Chlorophyceae) protects H9c2 cardiomyoblasts from H ₂ O ₂ -induced oxidative stress. | 0 |
| 13 | Interrelation between Programmed Cell Death and Immunogenic Cell Death: Take Antitumor Nanodrug as an Example. 2201406 | 0 |
| 12 | L-Fucose inhibits the progression of cholangiocarcinoma by causing microRNA-200b overexpression. Publish Ahead of Print, | 0 |
| 11 | Protective effect of GK2 fused BLVRA protein against oxidative stress-induced dopaminergic neuronal cell damage. | 0 |
| 10 | Evidence for existence of an apoptosis-inducing BH3-only protein, sayonara, in <i>Drosophila</i> . 2023 , 42, | 1 |
| 9 | Comparison among Neuroblastoma Stages Suggests the Involvement of Mitochondria in Tumor Progression. 2023 , 11, 596 | 0 |
| 8 | Caspase-6 is a key regulator of cross-talk signal way in PANoptosis in cancer. | 0 |

- 7 Water-soluble copper(ii) 5-fluorouracil complexes bearing polypyridyl co-ligands: synthesis, structures and anticancer activity. ○
- 6 Triap1 upregulation promotes escape from mitotic-slippage-induced G1 arrest. **2023**, 42, 112215 ○
- 5 Ginger-Derived 3HDT Exerts Antiproliferative Effects on Breast Cancer Cells by Apoptosis and DNA Damage. **2023**, 24, 5741 ○
- 4 Protective effects of butylated hydroxytoluene on the initiation of N-nitrosodiethylamine-induced hepatocellular carcinoma in albino rats. **2023**, 42, 096032712311656 ○
- 3 Nanotubes fabricated from a triple helix polysaccharide as a novel carrier delivering doxorubicin for breast cancer therapy. **2023**, 124153 ○
- 2 The Role of Taurine in the Reproductive System: A Focus on Mitochondria-related Mechanisms. **2023**, 239-273 ○
- 1 Young Shoots of Red Beet and the Root at Full Maturity Inhibit Proliferation and Induce Apoptosis in Breast Cancer Cell Lines. **2023**, 24, 6889 ○