

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Reactive oxygen species, antioxidants, and the mammalian thioredoxin system1 1This review is based on the licentiate thesis "Thioredoxin reductase" interactions with the redox active compounds 1-chloro-2,4-dinitrobenzene and lipoic acid" by Jonas Nordberg, 2001, Karolinska Institute, Stockholm, ISBN 91-631-1064-4.. Free Radical Biology and Medicine, 2001, 31, 1287-1312.	1.3	2,223
2	Physiological functions of thioredoxin and thioredoxin reductase. FEBS Journal, 2000, 267, 6102-6109.	0.2	2,091
3	Selenium Utilization by GPX4 Is Required to Prevent Hydroperoxide-Induced Ferroptosis. Cell, 2018, 172, 409-422.e21.	13.5	920
4	Focus on mammalian thioredoxin reductases " Important selenoproteins with versatile functions. Biochimica Et Biophysica Acta - General Subjects, 2009, 1790, 495-526.	1.1	546
5	Mammalian deoxyribonucleoside kinases. , 1995, 67, 155-186.		508
6	The thioredoxin system in cancer. Seminars in Cancer Biology, 2006, 16, 420-426.	4.3	471
7	Structure and mechanism of mammalian thioredoxin reductase: The active site is a redox-active selenolthiol/selenenylsulfide formed from the conserved cysteine-selenocysteine sequence. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 5854-5859.	3.3	442
8	Thioredoxin Glutathione Reductase from Schistosoma mansoni: An Essential Parasite Enzyme and a Key Drug Target. PLoS Medicine, 2007, 4, e206.	3.9	285
9	Preparation and assay of mammalian thioredoxin and thioredoxin reductase. Methods in Enzymology, 1999, 300, 226-239.	0.4	283
10	Paradoxical Roles of Antioxidant Enzymes: Basic Mechanisms and Health Implications. Physiological Reviews, 2016, 96, 307-364.	13.1	283
11	Selenocysteine in proteins" properties and biotechnological use. Biochimica Et Biophysica Acta - General Subjects, 2005, 1726, 1-13.	1.1	275
12	Selenoproteins" What unique properties can arise with selenocysteine in place of cysteine?. Experimental Cell Research, 2010, 316, 1296-1303.	1.2	258
13	A novel persulfide detection method reveals protein persulfide- and polysulfide-reducing functions of thioredoxin and glutathione systems. Science Advances, 2016, 2, e1500968.	4.7	250
14	Rat and Calf Thioredoxin Reductase Are Homologous to Glutathione Reductase with a Carboxyl-terminal Elongation Containing a Conserved Catalytically Active Penultimate Selenocysteine Residue. Journal of Biological Chemistry, 1998, 273, 8581-8591.	1.6	236
15	High-level expression in Escherichia coli of selenocysteine-containing rat thioredoxin reductase utilizing gene fusions with engineered bacterial-type SECIS elements and co-expression with the selA, selB and selC genes 1 Edited by M. Gottesman. Journal of Molecular Biology, 1999, 292, 1003-1016.	2.0	226
16	Selenoprotein Gene Nomenclature. Journal of Biological Chemistry, 2016, 291, 24036-24040.	1.6	207
17	Active sites of thioredoxin reductases: Why selenoproteins?. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12618-12623.	3.3	193
18	Inhibition of thioredoxin reductase but not of glutathione reductase by the major classes of alkylating and platinum-containing anticancer compounds. Free Radical Biology and Medicine, 2005, 39, 696-703.	1.3	193

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19	ROS-dependent activation of JNK converts p53 into an efficient inhibitor of oncogenes leading to robust apoptosis. <i>Cell Death and Differentiation</i> , 2014, 21, 612-623.	5.0	193
20	TrxR1 as a Potent Regulator of the Nrf2-Keap1 Response System. <i>Antioxidants and Redox Signaling</i> , 2015, 23, 823-853.	2.5	188
21	Mammalian Thioredoxin Reductase Is Irreversibly Inhibited by Dinitrohalobenzenes by Alkylation of Both the Redox Active Selenocysteine and Its Neighboring Cysteine Residue. <i>Journal of Biological Chemistry</i> , 1998, 273, 10835-10842.	1.6	185
22	Efficient Reduction of Lipoamide and Lipoic Acid by Mammalian Thioredoxin Reductase. <i>Biochemical and Biophysical Research Communications</i> , 1996, 225, 268-274.	1.0	178
23	Regulation of the Mammalian Selenoprotein Thioredoxin Reductase 1 in Relation to Cellular Phenotype, Growth, and Signaling Events. <i>Antioxidants and Redox Signaling</i> , 2004, 6, 41-52.	2.5	173
24	1-Chloro-2,4-dinitrobenzene Is an Irreversible Inhibitor of Human Thioredoxin Reductase. <i>Journal of Biological Chemistry</i> , 1995, 270, 3479-3482.	1.6	172
25	Crystal Structure and Catalysis of the Selenoprotein Thioredoxin Reductase 1. <i>Journal of Biological Chemistry</i> , 2009, 284, 3998-4008.	1.6	168
26	The Mammalian Cytosolic Selenoenzyme Thioredoxin Reductase Reduces Ubiquinone. <i>Journal of Biological Chemistry</i> , 2003, 278, 2141-2146.	1.6	167
27	Rapid Induction of Cell Death by Selenium-compromised Thioredoxin Reductase 1 but Not by the Fully Active Enzyme Containing Selenocysteine. <i>Journal of Biological Chemistry</i> , 2003, 278, 15966-15972.	1.6	153
28	Analysis of the inhibition of mammalian thioredoxin, thioredoxin reductase, and glutaredoxin by cis-diamminedichloroplatinum (II) and its major metabolite, the glutathione-platinum complex. <i>Free Radical Biology and Medicine</i> , 2001, 31, 1170-1178.	1.3	150
29	Irreversible inhibition of cytosolic thioredoxin reductase 1 as a mechanistic basis for anticancer therapy. <i>Science Translational Medicine</i> , 2018, 10, .	5.8	147
30	APR-246/PRIMA-1MET inhibits thioredoxin reductase 1 and converts the enzyme to a dedicated NADPH oxidase. <i>Cell Death and Disease</i> , 2013, 4, e881-e881.	2.7	142
31	The thioredoxin reductase inhibitor auranofin triggers apoptosis through a Bax/Bak-dependent process that involves peroxiredoxin 3 oxidation. <i>Biochemical Pharmacology</i> , 2008, 76, 1097-1109.	2.0	141
32	Cell Death by SecTRAPs: Thioredoxin Reductase as a Prooxidant Killer of Cells. <i>PLoS ONE</i> , 2008, 3, e1846.	1.1	139
33	Selective assays for thymidine kinase 1 and 2 and deoxycytidine kinase and their activities in extracts from human cells and tissues. <i>Biochemical and Biophysical Research Communications</i> , 1992, 188, 712-718.	1.0	136
34	Interactions of Quinones with Thioredoxin Reductase. <i>Journal of Biological Chemistry</i> , 2004, 279, 2583-2592.	1.6	125
35	Thioredoxin-related protein of 14 kDa is an efficient L-cystine reductase and S-denitrosylase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6964-6969.	3.3	125
36	Control of protein function through oxidation and reduction of persulfidated states. <i>Science Advances</i> , 2020, 6, eaax8358.	4.7	121

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37	High levels of thioredoxin reductase 1 modulate drug-specific cytotoxic efficacy. <i>Free Radical Biology and Medicine</i> , 2009, 47, 1661-1671.	1.3	114
38	Repurposing of auranofin: Thioredoxin reductase remains a primary target of the drug. <i>Biochimie</i> , 2019, 162, 46-54.	1.3	113
39	Effects of selenite and chelating agents on mammalian thioredoxin reductase inhibited by mercury: implications for treatment of mercury poisoning. <i>FASEB Journal</i> , 2011, 25, 370-381.	0.2	104
40	Interactions of Nitroaromatic Compounds with the Mammalian Selenoprotein Thioredoxin Reductase and the Relation to Induction of Apoptosis in Human Cancer Cells. <i>Journal of Biological Chemistry</i> , 2006, 281, 5593-5603.	1.6	102
41	Truncated Thioredoxin Is a Mitogenic Cytokine for Resting Human Peripheral Blood Mononuclear Cells and Is Present in Human Plasma. <i>Journal of Biological Chemistry</i> , 2000, 275, 37474-37480.	1.6	95
42	Cisplatin and Oxaliplatin Toxicity: Importance of Cochlear Kinetics as a Determinant for Ototoxicity. <i>Journal of the National Cancer Institute</i> , 2009, 101, 37-47.	3.0	93
43	Substrate and inhibitor specificities differ between human cytosolic and mitochondrial thioredoxin reductases: Implications for development of specific inhibitors. <i>Free Radical Biology and Medicine</i> , 2011, 50, 689-699.	1.3	93
44	Expression of deoxycytidine kinase and phosphorylation of 2-chlorodeoxyadenosine in human normal and tumour cells and tissues. <i>European Journal of Cancer</i> , 1995, 31, 202-208.	1.3	91
45	Noble metal targeting of thioredoxin reductase α covalent complexes with thioredoxin and thioredoxin-related protein of 14 kDa triggered by cisplatin. <i>Free Radical Biology and Medicine</i> , 2010, 49, 1765-1778.	1.3	89
46	Selective activation of oxidized PTP1B by the thioredoxin system modulates PDGF- β receptor tyrosine kinase signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 13398-13403.	3.3	89
47	Exploiting the 21st amino acid ϵ purifying and labeling proteins by selenolate targeting. <i>Nature Methods</i> , 2004, 1, 61-66.	9.0	85
48	Evidence for intriguingly complex transcription of human thioredoxin reductase 1. <i>Free Radical Biology and Medicine</i> , 2004, 36, 641-656.	1.3	83
49	Dietary methionine can sustain cytosolic redox homeostasis in the mouse liver. <i>Nature Communications</i> , 2015, 6, 6479.	5.8	82
50	p53-dependent inhibition of TrxR1 contributes to the tumor-specific induction of apoptosis by RITA. <i>Cell Cycle</i> , 2009, 8, 3584-3591.	1.3	81
51	The Core Promoter of Human Thioredoxin Reductase 1. <i>Journal of Biological Chemistry</i> , 2001, 276, 30542-30551.	1.6	79
52	Assessment of Production Conditions for Efficient Use of Escherichia coli in High-Yield Heterologous Recombinant Selenoprotein Synthesis. <i>Applied and Environmental Microbiology</i> , 2004, 70, 5159-5167.	1.4	78
53	Measurement of Thioredoxin and Thioredoxin Reductase. <i>Current Protocols in Toxicology / Editorial Board, Mahin D Maines (editor-in-chief) [et al]</i> , 2005, 24, Unit 7.4..	1.1	77
54	Structure Mechanism Insights and the Role of Nitric Oxide Donation Guide the Development of Oxadiazole-2-Oxides as Therapeutic Agents against Schistosomiasis. <i>Journal of Medicinal Chemistry</i> , 2009, 52, 6474-6483.	2.9	74

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55	Selenoprotein TRXR-1 and GSR-1 are essential for removal of old cuticle during molting in <i>Caenorhabditis elegans</i> . Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1064-1069.	3.3	69
56	Properties and levels of deoxynucleoside kinases in normal and tumor cells; implications for chemotherapy. Advances in Enzyme Regulation, 1994, 34, 13-25.	2.9	67
57	A Txnrd1-dependent metabolic switch alters hepatic lipogenesis, glycogen storage, and detoxification. Free Radical Biology and Medicine, 2013, 63, 369-380.	1.3	66
58	The A to Z of modulated cell patterning by mammalian thioredoxin reductases. Free Radical Biology and Medicine, 2018, 115, 484-496.	1.3	66
59	Cytosolic thioredoxin reductase 1 is required for correct disulfide formation in the ER. EMBO Journal, 2017, 36, 693-702.	3.5	65
60	Thioredoxin Reductase Inhibition for Cancer Therapy. Annual Review of Pharmacology and Toxicology, 2022, 62, 177-196.	4.2	64
61	Selenocysteine Insertion at a Predefined UAG Codon in a Release Factor 1 (RF1)-depleted Escherichia coli Host Strain Bypasses Species Barriers in Recombinant Selenoprotein Translation. Journal of Biological Chemistry, 2017, 292, 5476-5487.	1.6	60
62	Mitochondrial peroxiredoxin 3 is rapidly oxidized in cells treated with isothiocyanates. Free Radical Biology and Medicine, 2008, 45, 494-502.	1.3	59
63	Hepatocyte DNA replication in growing liver requires either glutathione or a single allele of txnrd1. Free Radical Biology and Medicine, 2012, 52, 803-810.	1.3	59
64	Deoxycytidine kinase is constitutively expressed in human lymphocytes: Consequences for compartmentation effects, unscheduled dna synthesis, and viral replication in resting cells. Experimental Cell Research, 1988, 178, 335-342.	1.2	58
65	NADPH-dependent and -independent disulfide reductase systems. Free Radical Biology and Medicine, 2018, 127, 248-261.	1.3	58
66	Comprehensive chemical proteomics for target deconvolution of the redox active drug auranofin. Redox Biology, 2020, 32, 101491.	3.9	58
67	The Selenium-independent Inherent Pro-oxidant NADPH Oxidase Activity of Mammalian Thioredoxin Reductase and Its Selenium-dependent Direct Peroxidase Activities. Journal of Biological Chemistry, 2010, 285, 21708-21723.	1.6	57
68	Multilevel Regulation of 2-Cys Peroxiredoxin Reaction Cycle by S-Nitrosylation. Journal of Biological Chemistry, 2013, 288, 11312-11324.	1.6	57
69	Hepatocyte Hyperproliferation upon Liver-Specific Co-disruption of Thioredoxin-1, Thioredoxin Reductase-1, and Glutathione Reductase. Cell Reports, 2017, 19, 2771-2781.	2.9	57
70	Targeting the Selenoprotein Thioredoxin Reductase 1 for Anticancer Therapy. Advances in Cancer Research, 2017, 136, 139-151.	1.9	57
71	Overexpression of Enzymatically Active Human Cytosolic and Mitochondrial Thioredoxin Reductase in HEK-293 Cells. Journal of Biological Chemistry, 2004, 279, 54510-54517.	1.6	56
72	The 19S Deubiquitinase Inhibitor b-AP15 Is Enriched in Cells and Elicits Rapid Commitment to Cell Death. Molecular Pharmacology, 2014, 85, 932-945.	1.0	55

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73	Redox active motifs in selenoproteins. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6976-6981.	3.3	54
74	TrxR1, Gsr, and oxidative stress determine hepatocellular carcinoma malignancy. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11408-11417.	3.3	54
75	Thioredoxin Reductase Inhibition Elicits Nrf2-Mediated Responses in Clara Cells: Implications for Oxidant-Induced Lung Injury. Antioxidants and Redox Signaling, 2012, 17, 1407-1416.	2.5	53
76	Regeneration of the antioxidant ubiquinol by lipoamide dehydrogenase, thioredoxin reductase and glutathione reductase. BioFactors, 2003, 18, 45-50.	2.6	51
77	Bicarbonate is essential for protein-tyrosine phosphatase 1B (PTP1B) oxidation and cellular signaling through EGF-triggered phosphorylation cascades. Journal of Biological Chemistry, 2019, 294, 12330-12338.	1.6	51
78	Thioredoxin reductase 1 is upregulated in atherosclerotic plaques: specific induction of the promoter in human macrophages by oxidized low-density lipoproteins. Free Radical Biology and Medicine, 2004, 37, 71-85.	1.3	46
79	System-wide identification and prioritization of enzyme substrates by thermal analysis. Nature Communications, 2021, 12, 1296.	5.8	44
80	Human Protein Atlas of redox systems – What can be learnt?. Biochimica Et Biophysica Acta - General Subjects, 2011, 1810, 111-138.	1.1	43
81	Direct Observation of Methylmercury and Auranofin Binding to Selenocysteine in Thioredoxin Reductase. Inorganic Chemistry, 2020, 59, 2711-2718.	1.9	43
82	Irreversible TrxR1 inhibitors block STAT3 activity and induce cancer cell death. Science Advances, 2020, 6, eaax7945.	4.7	43
83	Recombinant Expression of Mammalian Selenocysteine-Containing Thioredoxin Reductase and Other Selenoproteins in Escherichia coli. Methods in Enzymology, 2002, 347, 226-235.	0.4	42
84	Thioredoxin reductase 1 suppresses adipocyte differentiation and insulin responsiveness. Scientific Reports, 2016, 6, 28080.	1.6	42
85	Details in the catalytic mechanism of mammalian thioredoxin reductase 1 revealed using point mutations and juglone-coupled enzyme activities. Free Radical Biology and Medicine, 2016, 94, 110-120.	1.3	42
86	Which Antioxidant System Shapes Intracellular H ₂ O ₂ Gradients?. Antioxidants and Redox Signaling, 2019, 31, 664-670.	2.5	42
87	Cross Talk in HEK293 Cells Between Nrf2, HIF, and NF- κ B Activities upon Challenges with Redox Therapeutics Characterized with Single-Cell Resolution. Antioxidants and Redox Signaling, 2017, 26, 229-246.	2.5	41
88	Induction of Cell Membrane Protrusions by the N-terminal Glutaredoxin Domain of a Rare Splice Variant of Human Thioredoxin Reductase 1. Journal of Biological Chemistry, 2008, 283, 2814-2821.	1.6	38
89	Prolonged antigen exposure with carbohydrate particle based vaccination prevents allergic immune responses in sensitized mice. Allergy: European Journal of Allergy and Clinical Immunology, 2009, 64, 919-926.	2.7	38
90	Entinostat up-regulates the CAMP gene encoding LL-37 via activation of STAT3 and HIF-1 α transcription factors. Scientific Reports, 2016, 6, 33274.	1.6	38

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91	Rutin protects against H ₂ O ₂ -triggered impaired relaxation of placental arterioles and induces Nrf2-mediated adaptation in Human Umbilical Vein Endothelial Cells exposed to oxidative stress. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2017, 1861, 1177-1189.	1.1	38
92	Sepp1UF forms are N-terminal selenoprotein P truncations that have peroxidase activity when coupled with thioredoxin reductase-1. <i>Free Radical Biology and Medicine</i> , 2014, 69, 67-76.	1.3	37
93	Chemical Reactivity Window Determines Prodrug Efficiency toward Glutathione Transferase Overexpressing Cancer Cells. <i>Molecular Pharmaceutics</i> , 2016, 13, 2010-2025.	2.3	37
94	The conserved Trp114 residue of thioredoxin reductase 1 has a redox sensor-like function triggering oligomerization and crosslinking upon oxidative stress related to cell death. <i>Cell Death and Disease</i> , 2015, 6, e1616-e1616.	2.7	36
95	Thioredoxin reductase 1 and NADPH directly protect protein tyrosine phosphatase 1B from inactivation during H ₂ O ₂ exposure. <i>Journal of Biological Chemistry</i> , 2017, 292, 14371-14380.	1.6	36
96	Tagging recombinant proteins with a Sel-tag for purification, labeling with electrophilic compounds or radiolabeling with ¹¹ C. <i>Nature Protocols</i> , 2006, 1, 604-613.	5.5	35
97	Thioredoxin-related protein of 14 kDa as a modulator of redox signalling pathways. <i>British Journal of Pharmacology</i> , 2019, 176, 544-553.	2.7	35
98	Inhibition of thioredoxin reductase 1 by porphyrins and other small molecules identified by a high-throughput screening assay. <i>Free Radical Biology and Medicine</i> , 2011, 50, 1114-1123.	1.3	34
99	Pyrroloquinoline quinone modulates the kinetic parameters of the mammalian selenoprotein thioredoxin reductase 1 and is an inhibitor of glutathione reductase. <i>Biochemical Pharmacology</i> , 2012, 83, 815-820.	2.0	33
100	Expression of selenocysteine-containing glutathione S-transferase in <i>Escherichia coli</i> . <i>Biochemical and Biophysical Research Communications</i> , 2004, 321, 94-101.	1.0	32
101	Cisplatin and oxaliplatin are toxic to cochlear outer hair cells and both target thioredoxin reductase in organ of Corti cultures. <i>Acta Oto-Laryngologica</i> , 2014, 134, 448-454.	0.3	31
102	Homozygous mutation in TXNRD1 is associated with genetic generalized epilepsy. <i>Free Radical Biology and Medicine</i> , 2017, 106, 270-277.	1.3	31
103	Time- and cell-resolved dynamics of redox-sensitive Nrf2, HIF and NF- κ B activities in 3D spheroids enriched for cancer stem cells. <i>Redox Biology</i> , 2017, 12, 403-409.	3.9	31
104	Prominent expression of the selenoprotein thioredoxin reductase in the medullary rays of the rat kidney and thioredoxin reductase mRNA variants differing at the 5' untranslated region. <i>Biochemical Journal</i> , 2000, 347, 661-668.	1.7	30
105	Highly active dimeric and low-activity tetrameric forms of selenium-containing rat thioredoxin reductase 1. <i>Free Radical Biology and Medicine</i> , 2009, 46, 893-904.	1.3	30
106	Redox effects and cytotoxic profiles of MJ25 and auranofin towards malignant melanoma cells. <i>Oncotarget</i> , 2015, 6, 16488-16506.	0.8	30
107	Inhibitory nitrosylation of mammalian thioredoxin reductase 1: Molecular characterization and evidence for its functional role in cellular nitroso-redox imbalance. <i>Free Radical Biology and Medicine</i> , 2016, 97, 375-385.	1.3	30
108	On the Phosphorylation of 2-chlorodeoxy-adenosine (CdA) and Its Correlation with Clinical Response in Leukemia Treatment. <i>Leukemia and Lymphoma</i> , 1996, 21, 225-231.	0.6	29

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109	Differential regulation of expression of cytosolic and mitochondrial thioredoxin reductase in rat liver and kidney. Archives of Biochemistry and Biophysics, 2007, 459, 178-188.	1.4	29
110	HER2-Positive Tumors Imaged Within 1 Hour Using a Site-Specifically ¹¹¹ C-Labeled Sel-Tagged Affibody Molecule. Journal of Nuclear Medicine, 2012, 53, 1446-1453.	2.8	29
111	Superoxide production by dinitrophenyl-derivatized thioredoxin reductase - a model for the mechanism and correlation to immunostimulation by dinitrohalobenzenes. BioFactors, 1999, 10, 219-226.	2.6	28
112	Biochemical Discrimination between Selenium and Sulfur 1: A Single Residue Provides Selenium Specificity to Human Selenocysteine Lyase. PLoS ONE, 2012, 7, e30581.	1.1	28
113	Selenium and selenoproteins in (redox) signaling, diseases, and animal models - 200 year anniversary issue. Free Radical Biology and Medicine, 2018, 127, 1-2.	1.3	27
114	Selective, Modular Probes for Thioredoxins Enabled by Rational Tuning of a Unique Disulfide Structure Motif. Journal of the American Chemical Society, 2021, 143, 8791-8803.	6.6	27
115	Serum thioredoxin reductase levels increase in response to chemically induced acute liver injury. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 2105-2111.	1.1	26
116	Sec-containing TrxR1 is essential for self-sufficiency of cells by control of glucose-derived H2O2. Cell Death and Disease, 2014, 5, e1235-e1235.	2.7	25
117	Fragment-Based Discovery of a Regulatory Site in Thioredoxin Glutathione Reductase Acting as a "Doorstop" for NADPH Entry. ACS Chemical Biology, 2018, 13, 2190-2202.	1.6	25
118	Phosphorylation of 2-chlorodeoxyadenosine (CdA) in extracts of peripheral blood mononuclear cells of leukaemic patients. British Journal of Haematology, 1994, 87, 715-718.	1.2	24
119	Characterization of Lead Compounds Targeting the Selenoprotein Thioredoxin Glutathione Reductase for Treatment of Schistosomiasis. ACS Infectious Diseases, 2020, 6, 393-405.	1.8	24
120	The human thioredoxin reductase-1 splice variant TXNRD1_v3 is an atypical inducer of cytoplasmic filaments and cell membrane filopodia. Biochimica Et Biophysica Acta - Molecular Cell Research, 2009, 1793, 1588-1596.	1.9	23
121	Indolin-2-one compounds targeting thioredoxin reductase as potential anticancer drug leads. Oncotarget, 2016, 7, 40233-40251.	0.8	23
122	Studies of an active site mutant of the selenoprotein thioredoxin reductase: The Ser-Cys-Cys-Ser motif of the insect orthologue is not sufficient to replace the Cys-Sec dyad in the mammalian enzyme. Free Radical Biology and Medicine, 2006, 41, 649-656.	1.3	22
123	Red wine triggers cell death and thioredoxin reductase inhibition: Effects beyond resveratrol and SIRT1. Experimental Cell Research, 2009, 315, 1360-1371.	1.2	22
124	Absence of TXNIP in Humans Leads to Lactic Acidosis and Low Serum Methionine Linked to Deficient Respiration on Pyruvate. Diabetes, 2019, 68, 709-723.	0.3	22
125	Cyclic 5-membered disulfides are not selective substrates of thioredoxin reductase, but are opened nonspecifically. Nature Communications, 2022, 13, 1754.	5.8	22
126	The Rare TXNRD1_v3 (Nov3) Splice Variant of Human Thioredoxin Reductase 1 Protein Is Targeted to Membrane Rafts by N-Acylation and Induces Filopodia Independently of Its Redox Active Site Integrity. Journal of Biological Chemistry, 2013, 288, 10002-10011.	1.6	21

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127	The thioredoxin system in cancer – introduction to a thematic volume of Seminars in Cancer Biology. Seminars in Cancer Biology, 2006, 16, 419.	4.3	20
128	Redox activation of Fe(III) – thiosemicarbazones and Fe(III) – bleomycin by thioredoxin reductase: specificity of enzymatic redox centers and analysis of reactive species formation by ESR spin trapping. Free Radical Biology and Medicine, 2013, 60, 183-194.	1.3	20
129	Wobble decoding by the Escherichia coli selenocysteine insertion machinery. Nucleic Acids Research, 2013, 41, 9800-9811.	6.5	20
130	Selective cellular probes for mammalian thioredoxin reductase TrxR1: Rational design of RX1, a modular 1,2-thiaselenane redox probe. Chem, 2022, 8, 1493-1517.	5.8	20
131	Prominent expression of the selenoprotein thioredoxin reductase in the medullary rays of the rat kidney and thioredoxin reductase mRNA variants differing at the 5' untranslated region. Biochemical Journal, 2000, 347, 661.	1.7	19
132	Cytotoxic unsaturated electrophilic compounds commonly target the ubiquitin proteasome system. Scientific Reports, 2019, 9, 9841.	1.6	19
133	Common modifications of selenocysteine in selenoproteins. Essays in Biochemistry, 2020, 64, 45-53.	2.1	19
134	Selenolthiol and Dithiol C-Terminal Tetrapeptide Motifs for One-Step Purification and Labeling of Recombinant Proteins Produced in E. coli. ChemBioChem, 2006, 7, 1976-1981.	1.3	18
135	Thiophosphate and selenite conversely modulate cell death induced by glutathione depletion or cisplatin: effects related to activity and Sec contents of thioredoxin reductase. Biochemical Journal, 2012, 447, 167-174.	1.7	18
136	To inhibit TrxR1 is to inactivate STAT3 – Inhibition of TrxR1 enzymatic function by STAT3 small molecule inhibitors. Redox Biology, 2020, 36, 101646.	3.9	18
137	Comprehensive chemical proteomics analyses reveal that the new TRi-1 and TRi-2 compounds are more specific thioredoxin reductase 1 inhibitors than auranofin. Redox Biology, 2021, 48, 102184.	3.9	18
138	Targeting of Nrf2 improves antitumoral responses by human NK cells, TIL and CAR T cells during oxidative stress. , 2022, 10, e004458.		18
139	Serum thioredoxin reductase is highly increased in mice with hepatocellular carcinoma and its activity is restrained by several mechanisms. Free Radical Biology and Medicine, 2016, 99, 426-435.	1.3	17
140	Inhibition and crosslinking of the selenoprotein thioredoxin reductase-1 by p-benzoquinone. Redox Biology, 2020, 28, 101335.	3.9	17
141	Mitochondrial Versus Cytosolic Activities of Deoxyribonucleoside Salvage Enzymes. Advances in Experimental Medicine and Biology, 1995, 370, 201-204.	0.8	17
142	Titration and Conditional Knockdown of the prfB Gene in Escherichia coli: Effects on Growth and Overproduction of the Recombinant Mammalian Selenoprotein Thioredoxin Reductase. Applied and Environmental Microbiology, 2007, 73, 432-441.	1.4	16
143	Expression and Substrate Specificities of Human Thymidine Kinase 1, Thymidine Kinase 2 and Deoxycytidine Kinase. Advances in Experimental Medicine and Biology, 1991, 309B, 239-243.	0.8	16
144	Efficient selenocysteine-dependent reduction of toxoflavin by mammalian thioredoxin reductase. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 2511-2517.	1.1	15

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145	Production and purification of homogenous recombinant human selenoproteins reveals a unique codon skipping event in E. coli and GPX4-specific affinity to bromosulphophthalein. <i>Redox Biology</i> , 2021, 46, 102070.	3.9	15
146	Perspectives of TrxR1-based cancer therapies. , 2020, , 639-667.		14
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