Rakesh C Kukreja

List of Publications by Year
in descending order

89 papers	4,682 citations	109264 35 h-index	102432 66 g-index
89 all docs	89 docs citations	89 times ranked	4517 citing authors

#	Article	IF	Citations
1	Phosphodiesterase-5 Inhibition With Sildenafil Attenuates Cardiomyocyte Apoptosis and Left Ventricular Dysfunction in a Chronic Model of Doxorubicin Cardiotoxicity. Circulation, 2005, 111, 1601-1610.	1.6	310
2	Phosphodiesterase-5 Inhibitor Sildenafil Preconditions Adult Cardiac Myocytes against Necrosis and Apoptosis. Journal of Biological Chemistry, 2005, 280, 12944-12955.	1.6	304
3	Sildenafil (Viagra) induces powerful cardioprotective effect via opening of mitochondrial K_{ATP}channels in rabbits. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H1263-H1269.	1.5	260
4	Sildenafil Induces Delayed Preconditioning Through Inducible Nitric Oxide Synthaseâ€“Dependent Pathway in Mouse Heart. Circulation Research, 2003, 92, 595-597.	2.0	225
5	PDE5 inhibitors as therapeutics for heart disease, diabetes and cancer. , 2015, 147, 12-21.		187
6	Pharmacological preconditioning with sildenafil: Basic mechanisms and clinical implications. Vascular Pharmacology, 2005, 42, 219-232.	1.0	184
7	Protein Kinase G-dependent Cardioprotective Mechanism of Phosphodiesterase-5 Inhibition Involves Phosphorylation of ERK and GSK3Î². Journal of Biological Chemistry, 2008, 283, 29572-29585.	1.6	175
8	Cardioprotection with phosphodiesterase-5 inhibitionâ€"a novel preconditioning strategy. Journal of Molecular and Cellular Cardiology, 2004, 36, 165-173.	0.9	143
9	Inducible Nitric Oxide Synthase Mediates Delayed Myocardial Protection Induced by Activation of Adenosine A₁Receptors. Circulation, 2000, 102, 902-907.	1.6	141
10	Sildenafil (Viagra) attenuates ischemic cardiomyopathy and improves left ventricular function in mice. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 294, H1398-H1406.	1.5	138
11	Sildenafil increases chemotherapeutic efficacy of doxorubicin in prostate cancer and ameliorates cardiac dysfunction. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18202-18207.	3.3	138
12	Phosphodiesterase-5 Inhibitor, Tadalafil, Protects Against Myocardial Ischemia/Reperfusion Through Protein-Kinase Gâ€“Dependent Generation of Hydrogen Sulfide. Circulation, 2009, 120, S31-6.	1.6	136
13	Essential Role of Inducible Nitric Oxide Synthase in Monophosphoryl Lipid Aâ€“Induced Late Cardioprotection. Circulation, 1999, 99, 2157-2163.	1.6	134
14	ERK phosphorylation mediates sildenafil-induced myocardial protection against ischemia-reperfusion injury in mice. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1236-H1243.	1.5	121
15	MicroRNAs: New Players in Cardiac Injury and Protection. Molecular Pharmacology, 2011, 80, 558-564.	1.0	119
16	Cyclic GMP-dependent Protein Kinase IÎ± Attenuates Necrosis and Apoptosis Following Ischemia/Reoxygenation in Adult Cardiomyocyte. Journal of Biological Chemistry, 2006, 281, 38644-38652.	1.6	112
17	Sildenafil (Viagra) attenuates ischemic cardiomyopathy and improves left ventricular function in mice. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H1398-H1406.	1.5	102
18	Induction of MicroRNA-21 With Exogenous Hydrogen Sulfide Attenuates Myocardial Ischemic and Inflammatory Injury in Mice. Circulation: Cardiovascular Genetics, 2014, 7, 311-320.	5.1	97

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19	Vardenafil: a novel type 5 phosphodiesterase inhibitor reduces myocardial infarct size following ischemia/reperfusion injury via opening of mitochondrial KATP channels in rabbits. Journal of Molecular and Cellular Cardiology, 2006, 40, 405-411.	0.9	96
20	Long-Acting Phosphodiesterase-5 Inhibitor Tadalafil Attenuates Doxorubicin-Induced Cardiomyopathy without Interfering with Chemotherapeutic Effect. Journal of Pharmacology and Experimental Therapeutics, 2010, 334, 1023-1030.	1.3	93
21	Dietary Nitrate Supplementation Protects Against Doxorubicin-Induced Cardiomyopathy by Improving Mitochondrial Function. Journal of the American College of Cardiology, 2011, 57, 2181-2189.	1.2	82
22	Cyclic Guanosine Monophosphate Signaling and Phosphodiesterase-5 Inhibitors in Cardioprotection. Journal of the American College of Cardiology, 2012, 59, 1921-1927.	1.2	77
23	Chronic inhibition of phosphodiesterase 5 with tadalafil attenuates mitochondrial dysfunction in type 2 diabetic hearts: potential role of NO/SIRT1/PGC-1Î± signaling. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H1558-H1568.	1.5	76
24	Anti-Inflammatory and Cardioprotective Effects of Tadalafil in Diabetic Mice. PLoS ONE, 2012, 7, e45243.	1.1	72
25	Phosphodiesterase-5 inhibitor tadalafil attenuates oxidative stress and protects against myocardial ischemia/reperfusion injury in type 2 diabetic mice. Free Radical Biology and Medicine, 2013, 60, 80-88.	1.3	72
26	Phosphodiesterase 5 Inhibitors Enhance Chemotherapy Killing in Gastrointestinal/Genitourinary Cancer Cells. Molecular Pharmacology, 2014, 85, 408-419.	1.0	69
27	Sirtuin 1 (SIRT1) Activation Mediates Sildenafil Induced Delayed Cardioprotection against Ischemia-Reperfusion Injury in Mice. PLoS ONE, 2014, 9, e86977.	1.1	51
28	PDE5 inhibitors enhance the lethality of standard of care chemotherapy in pediatric CNS tumor cells. Cancer Biology and Therapy, 2014, 15, 758-767.	1.5	48
29	Potential markers and metabolic processes involved in the mechanism of radiation-induced heart injury. Canadian Journal of Physiology and Pharmacology, 2017, 95, 1190-1203.	0.7	46
30	Title is missing!. Molecular and Cellular Biochemistry, 1998, 186, 69-77.	1.4	43
31	Reperfusion Therapy with Rapamycin Attenuates Myocardial Infarction through Activation of AKT and ERK. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-16.	1.9	41
32	Sildenafil (Viagra) sensitizes prostate cancer cells to doxorubicin-mediated apoptosis through CD95. Oncotarget, 2016, 7, 4399-4413.	0.8	40
33	Emerging new uses of phosphodiesterase-5 inhibitors in cardiovascular diseases. Experimental and Clinical Cardiology, 2011, 16, e30-5.	1.3	40
34	Mitogen-activated protein kinases mediate heat shock-induced delayed protection in mouse heart. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H523-H532.	1.5	38
35	Myocardial preconditioning: Basic concepts and potential mechanisms. Molecular and Cellular Biochemistry, 1999, 196, 3-12.	1.4	37
36	Role of protein kinase C and 72 kDa heat shock protein in ischemic tolerance following heat stress in the rat heart. Molecular and Cellular Biochemistry, 1999, 195, 123-131.	1.4	36

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37	Reperfusion Injury: Basic Concepts and Protection Strategies. Journal of Thrombosis and Thrombolysis, 1997, 4, 7-24.	1.0	35
38	Emerging Role of mTOR Signaling-Related miRNAs in Cardiovascular Diseases. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-23.	1.9	32
39	Chronic treatment with long acting phosphodiesterase-5 inhibitor tadalafil alters proteomic changes associated with cytoskeletal rearrangement and redox regulation in Type 2 diabetic hearts. Basic Research in Cardiology, 2012, 107, 249.	2.5	29
40	Potential Therapeutic Strategies for Hypertension-Exacerbated Cardiotoxicity of Anticancer Drugs. Oxidative Medicine and Cellular Longevity, 2016, 2016, 1-9.	1.9	28
41	Sildenafil Potentiates the Therapeutic Efficacy of Docetaxel in Advanced Prostate Cancer by Stimulating NO-cGMP Signaling. Clinical Cancer Research, 2020, 26, 5720-5734.	3.2	28
42	Arterial Medial Calcification through Enhanced small Extracellular Vesicle Release in Smooth Muscle-Specific Asah1 Gene Knockout Mice. Scientific Reports, 2020, 10, 1645.	1.6	28
43	Monophosphoryl lipid A induces pharmacologic ?preconditioning? in rabbit hearts without concomitant expression of 70-kDa heat shock protein. Molecular and Cellular Biochemistry, 1996, 159, 73-80.	1.4	26
44	Beetroot juice reduces infarct size and improves cardiac function following ischemiaâ€"reperfusion injury: Possible involvement of endogenous H₂S. Experimental Biology and Medicine, 2015, 240, 669-681.	1.1	24
45	Myocardial connexin-43 and PKC signalling are involved in adaptation ofÂthe heart to irradiation-induced injury: Implication ofÂmiR-1 and miR-21. General Physiology and Biophysics, 2016, 35, 215-222.	0.4	24
46	Beet root juice protects against doxorubicin toxicity in cardiomyocytes while enhancing apoptosis in breast cancer cells. Molecular and Cellular Biochemistry, 2016, 421, 89-101.	1.4	24
47	Irradiation-Induced Cardiac Connexin-43 and miR-21 Responses Are Hampered by Treatment with Atorvastatin and Aspirin. International Journal of Molecular Sciences, 2018, 19, 1128.	1.8	24
48	Sildenafil and Cardioprotection. Current Pharmaceutical Design, 2013, 19, 6842-6847.	0.9	24
49	Cardiovascular risks and toxicity - The Achilles heel of androgen deprivation therapy in prostate cancer patients. Biochimica Et Biophysica Acta: Reviews on Cancer, 2020, 1874, 188383.	3.3	23
50	Monophosphoryl lipid A induces pharmacologic ?preconditioning? in rabbit hearts without concomitant expression of 70-kDa heat shock protein. Molecular and Cellular Biochemistry, 1996, 156, 1-8.	1.4	22
51	STAT3-miR-17/20 signalling axis plays a critical role in attenuating myocardial infarction following rapamycin treatment in diabetic mice. Cardiovascular Research, 2020, 116, 2103-2115.	1.8	21
52	Chronic treatment with novel nanoformulated micelles of rapamycin, Rapatar, protects diabetic heart against ischaemia/reperfusion injury. British Journal of Pharmacology, 2017, 174, 4771-4784.	2.7	18
53	Role of phosphodiesterase 1 in the pathophysiology of diseases and potential therapeutic opportunities. , 2021, 226, 107858.		18
54	Sodium Nitrite Fails to Limit Myocardial Infarct Size: Results from the CAESAR Cardioprotection Consortium (LB645). FASEB Journal, 2014, 28, LB645.	0.2	18

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55	Singlet oxygen: a potential culprit in myocardial injury?. Molecular and Cellular Biochemistry, 1992, 111, 17-24.	1.4	17
56	Targeted Inhibition of Phosphoinositide 3-Kinase/Mammalian Target of Rapamycin Sensitizes Pancreatic Cancer Cells to Doxorubicin without Exacerbating Cardiac Toxicity. Molecular Pharmacology, 2015, 88, 512-523.	1.0	12
57	PDE5 Inhibitor Tadalafil and Hydroxychloroquine Cotreatment Provides Synergistic Protection against Type 2 Diabetes and Myocardial Infarction in Mice. Journal of Pharmacology and Experimental Therapeutics, 2017, 361, 29-38.	1.3	12
58	Chronic inhibition of phosphodiesterase 5 with tadalafil affords cardioprotection in a mouse model of metabolic syndrome: role of nitric oxide. Molecular and Cellular Biochemistry, 2020, 468, 47-58.	1.4	12
59	Role of KATP Channel in Heat Shock and Pharmacological Preconditioninga. Annals of the New York Academy of Sciences, 1999, 874, 211-221.	1.8	11
60	Long-acting PDE5 inhibitor tadalafil prevents early doxorubicin-induced left ventricle diastolic dysfunction in juvenile mice: potential role of cytoskeletal proteins. Canadian Journal of Physiology and Pharmacology, 2017, 95, 295-304.	0.7	11
61	Randomized study of doxorubicin-based chemotherapy regimens, with and without sildenafil, with analysis of intermediate cardiac markers. Cardio-Oncology, 2018, 4, .	0.8	10
62	Differential Regulation of mTOR Complexes with miR-302a Attenuates Myocardial Reperfusion Injury in Diabetes. IScience, 2020, 23, 101863.	1.9	10
63	Myocardial Stunning. Journal of Cardiac Surgery, 1994, 9, 382-386.	0.3	9
64	Regulatory role of mammalian target of rapamycin signaling in exosome secretion and osteogenic changes in smooth muscle cells lacking acid ceramidase gene. FASEB Journal, 2021, 35, e21732.	0.2	8
65	Preclinical model of type 1 diabetes and myocardial ischemia/reperfusion injury in conscious rabbitsâ€"demonstration of cardioprotection with rapamycin. STAR Protocols, 2021, 2, 100772.	0.5	7
66	Rationale for the Early Clinical Application of Markers of Ischemia in Patients with Suspected Acute Coronary Syndromes. Cardiovascular Toxicology, 2001, 1, 125-134.	1.1	6
67	Phosphodiesterase-5 and Retargeting of Subcellular cGMP Signaling During Pathological Hypertrophy. Circulation, 2012, 126, 916-919.	1.6	6
68	A dual PI3 kinase/mTOR inhibitor BEZ235 reverses doxorubicin resistance in ABCB1 overexpressing ovarian and pancreatic cancer cell lines. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129556.	1.1	6
69	Activated Oxygen Species in Heart Failure. Heart Failure Reviews, 1999, 4, 1-12.	1.7	3
70	Nonurologic applications of phosphodiesterase type 5 inhibitors. Current Sexual Health Reports, 2007, 4, 64-70.	0.4	2
71	Corticosteroids and aldose reductase inhibitor Epalrestat modulates cardiac action potential via Kvî²1.1 (AKR6A8) subunit of voltage-gated potassium channel. Molecular and Cellular Biochemistry, 2017, 436, 71-78.	1.4	2
72	Myriad roles of voltage-activated potassium channel subunit Kvî²1.1 in the heart. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H546-H548.	1.5	2

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73	PDE5 inhibitor sildenafil attenuates cardiac microRNA 214 upregulation and pro-apoptotic signaling after chronic alcohol ingestion in mice. Molecular and Cellular Biochemistry, 2020, 471, 189-201.	1.4	2
74	Myocardial Protection by Monophosphoryl Lipid A: Potential Mechanisms. Cardiovascular Drug Reviews, 1999, 17, 265-280.	4.4	1
75	PDE1 Inhibition Attenuates Doxorubicinâ€Induced Toxicity in Primary Mouse Cardiomyocytes. FASEB Journal, 2019, 33, 817.12.	0.2	1
76	Phosphodiesteraseâ€5 Inhibition with Tadalafil Attenuates Left Ventricular Dysfunction and Cardiomyocyte Apoptosis in Doxorubicinâ€induced Cardiotoxicity in Mice. FASEB Journal, 2010, 24, 785.10.	0.2	1
77	Postconditioning Effect of PDE5 inhibitor, Sildenafil in Normal and Diabetic Rabbits following Myocardial Ischemia/Reperfusion injury.. FASEB Journal, 2018, 32, 580.16.	0.2	1
78	Embryonic Stem Cells Derived Exosomes Enhances Chemosensitivity of Doxorubicin in Breast Cancer Cells. FASEB Journal, 2019, 33, 646.7.	0.2	1
79	The role of tyrosine phosphorylation in the mechanism of ischemic preconditioning. Japanese Journal of Electrocardiology, 2000, 20, 89-96.	0.0	0
80	BAY 58â€2667, a Novel NOâ€Independent Activator of Soluble Guanylate Cyclase, Protects against Ischemia/Reperfusion Injury: Potential Role of Hydrogen Sulfide Signaling. FASEB Journal, 2010, 24, 787.4.	0.2	0
81	Rapamycin (Sirolimus)â€“induced protection against ischemiaâ€reperfusion injury is mediated through AMPK, Akt and JAK/STAT pathways in mouse heart. FASEB Journal, 2010, 24, 601.6.	0.2	0
82	Mitigation of Heart Failure Progression with Sildenafil Involves Inhibition of RhoA/Rhoâ€Kinase Pathway. FASEB Journal, 2010, 24, 601.13.	0.2	0
83	Adenoviral transfer of PKGIÎ±; attenuates apoptosis and necrosis in adipose derived stem cells. FASEB Journal, 2010, 24, lb34.	0.2	0
84	BEZ235, a selective PI3k/mTOR inhibitor, enhances the therapeutic efficacy of doxorubicin in pancreatic cancer (655.7). FASEB Journal, 2014, 28, 655.7.	0.2	0
85	mTOR inhibition protects diabetic heart against ischemia/reperfusion injury through STAT3 activation (1078.5). FASEB Journal, 2014, 28, .	0.2	0
86	Acute Alcohol Treatment and Cardiac Dysfunction in Obese Diabetic Mice: Role of PDE5 and MicroRNAâ€21. FASEB Journal, 2015, 29, 1020.9.	0.2	0
87	Rapamycin Alters MicroRNA Signature Profile in Diabetic Rabbit following Myocardial Ischemia Reperfusion Injury: A Preclinical Approach for Cardioprotection.. FASEB Journal, 2018, 32, 717.24.	0.2	0
88	Contribution of Ceramide Signaling to Activation of the mTORC1 Pathway and Calcification Nidus Formation in Coronary Arterial Smooth Muscle Cells. FASEB Journal, 2019, 33, 679.12.	0.2	0
89	Antiâ€Tumor Effect of Embryonic Stem Cell Derived Exosomes in Triple Negative Breast Cancer: Potential Role of TCF7â€Eâ€Cadherin and VEGF. FASEB Journal, 2022, 36, .	0.2	0