

Angus C. Nairn

List of Publications by Year in descending order

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240
papers

24,973
citations

4960

84
h-index

7950

149
g-index

243
all docs

243
docs citations

243
times ranked

22786
citing authors

#	ARTICLE	IF	CITATIONS
1	cAMP-regulated phosphoproteins DARPP-32, ARPP16/19, and RCS modulate striatal signal transduction through protein kinases and phosphatases. <i>Advances in Pharmacology</i> , 2021, 90, 39-65.	2.0	2
2	Exosomes as Emerging Biomarker Tools in Neurodegenerative and Neuropsychiatric Disordersâ€™A Proteomics Perspective. <i>Brain Sciences</i> , 2021, 11, 258.	2.3	16
3	Loss of Ftsj1 perturbs codon-specific translation efficiency in the brain and is associated with X-linked intellectual disability. <i>Science Advances</i> , 2021, 7, .	10.3	30
4	Regulation of Synaptic Transmission and Plasticity by Protein Phosphatase 1. <i>Journal of Neuroscience</i> , 2021, 41, 3040-3050.	3.6	18
5	GSAP regulates lipid homeostasis and mitochondrial function associated with Alzheimerâ€™s disease. <i>Journal of Experimental Medicine</i> , 2021, 218, .	8.5	14
6	Synaptic proteins associated with cognitive performance and neuropathology in older humans revealed by multiplexed fractionated proteomics. <i>Neurobiology of Aging</i> , 2021, 105, 99-114.	3.1	32
7	Differential Protein Expression in Striatal D1- and D2-Dopamine Receptor-Expressing Medium Spiny Neurons. <i>Proteomes</i> , 2020, 8, 27.	3.5	6
8	Direct Interaction of PP2A Phosphatase with GABAB Receptors Alters Functional Signaling. <i>Journal of Neuroscience</i> , 2020, 40, 2808-2816.	3.6	11
9	Editorial for Special Issue: Neuroproteomics. <i>Proteomes</i> , 2019, 7, 24.	3.5	0
10	Development of Targeted Mass Spectrometry-Based Approaches for Quantitation of Proteins Enriched in the Postsynaptic Density (PSD). <i>Proteomes</i> , 2019, 7, 12.	3.5	18
11	Alzheimerâ€™s-like pathology in aging rhesus macaques: Unique opportunity to study the etiology and treatment of Alzheimerâ€™s disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 26230-26238.	7.1	46
12	Making brain proteomics true to type. <i>Nature Biotechnology</i> , 2018, 36, 149-150.	17.5	0
13	Evaluation of the Phosphoproteome of Mouse Alpha 4/Beta 2-Containing Nicotinic Acetylcholine Receptors In Vitro and In Vivo. <i>Proteomes</i> , 2018, 6, 42.	3.5	11
14	Cell-Type-Specific Proteomics: A Neuroscience Perspective. <i>Proteomes</i> , 2018, 6, 51.	3.5	29
15	Phosphoproteomic Analysis of the Amygdala Response to Adolescent Glucocorticoid Exposure Reveals G-Protein Coupled Receptor Kinase 2 as a Target for Reducing Motivation for Alcohol. <i>Proteomes</i> , 2018, 6, 41.	3.5	4
16	The dominant protein phosphatase PP1c isoform in smooth muscle cells, PP1c ² , is essential for smooth muscle contraction. <i>Journal of Biological Chemistry</i> , 2018, 293, 16677-16686.	3.4	9
17	Striatin-1 is a B subunit of protein phosphatase PP2A that regulates dendritic arborization and spine development in striatal neurons. <i>Journal of Biological Chemistry</i> , 2018, 293, 11179-11194.	3.4	16
18	Isoform-Level Interpretation of High-Throughput Proteomics Data Enabled by Deep Integration with RNA-seq. <i>Journal of Proteome Research</i> , 2018, 17, 3431-3444.	3.7	23

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19	ARPP-16 Is a Striatal-Enriched Inhibitor of Protein Phosphatase 2A Regulated by Microtubule-Associated Serine/Threonine Kinase 3 (Mast 3 Kinase). <i>Journal of Neuroscience</i> , 2017, 37, 2709-2722.	3.6	31
20	A multiregional proteomic survey of the postnatal human brain. <i>Nature Neuroscience</i> , 2017, 20, 1787-1795.	14.8	138
21	Reciprocal regulation of ARPP-16 by PKA and MAST3 kinases provides a cAMP-regulated switch in protein phosphatase 2A inhibition. <i>ELife</i> , 2017, 6, .	6.0	24
22	Role of Striatal-Enriched Tyrosine Phosphatase in Neuronal Function. <i>Neural Plasticity</i> , 2016, 2016, 1-9.	2.2	28
23	The Histamine H3 Receptor Differentially Modulates Mitogen-activated Protein Kinase (MAPK) and Akt Signaling in Striatonigral and Striatopallidal Neurons. <i>Journal of Biological Chemistry</i> , 2016, 291, 21042-21052.	3.4	42
24	Phosphoproteomic Analysis Reveals a Novel Mechanism of CaMKII α Regulation Inversely Induced by Cocaine Memory Extinction versus Reconsolidation. <i>Journal of Neuroscience</i> , 2016, 36, 7613-7627.	3.6	46
25	STEP is a substrate of the E3 ligase parkin and is upregulated in Parkinson's disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 1202-1207.	7.1	52
26	Inhibitor of the Tyrosine Phosphatase STEP Reverses Cognitive Deficits in a Mouse Model of Alzheimer's Disease. <i>PLoS Biology</i> , 2014, 12, e1001923.	5.6	119
27	cAMP-PKA phosphorylation of tau confers risk for degeneration in aging association cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 5036-5041.	7.1	110
28	Understanding the antagonism of retinoblastoma protein dephosphorylation by PNUTS provides insights into the PP1 regulatory code. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 4097-4102.	7.1	112
29	Structural basis for protein phosphatase 1 regulation and specificity. <i>FEBS Journal</i> , 2013, 280, 596-611.	4.7	195
30	Synaptic NMDA receptor stimulation activates PP1 by inhibiting its phosphorylation by Cdk5. <i>Journal of Cell Biology</i> , 2013, 203, 521-535.	5.2	58
31	Substrate-Based Fragment Identification for the Development of Selective, Nonpeptidic Inhibitors of Striatal-Enriched Protein Tyrosine Phosphatase. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 7636-7650.	6.4	26
32	Selective Knockout of the Casein Kinase 2 in D1 Medium Spiny Neurons Controls Dopaminergic Function. <i>Biological Psychiatry</i> , 2013, 74, 113-121.	1.3	33
33	Ca ²⁺ -independent Activation of Ca ²⁺ /Calmodulin-dependent Protein Kinase II Bound to the C-terminal Domain of CaV2.1 Calcium Channels. <i>Journal of Biological Chemistry</i> , 2013, 288, 4637-4648.	3.4	28
34	Regulation of ERK1/2 mitogen-activated protein kinase by NMDA-receptor-induced seizure activity in cortical slices. <i>Brain Research</i> , 2013, 1507, 1-10.	2.2	7
35	The phosphorylation of ARPP19 by Greatwall renders the autoamplification of MPF independent of PKA in <i>Xenopus</i> oocytes. <i>Journal of Cell Science</i> , 2013, 126, 3916-26.	2.0	26
36	Regulation of neurite outgrowth mediated by localized phosphorylation of protein translational factor eEF2 in growth cones. <i>Developmental Neurobiology</i> , 2013, 73, 230-246.	3.0	14

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37	Differential effects of cocaine on histone posttranslational modifications in identified populations of striatal neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 9511-9516.	7.1	51
38	Proteasomal Degradation of Eukaryotic Elongation Factor-2 Kinase (EF2K) Is Regulated by cAMP-PKA Signaling and the SCF ^β TRCP Ubiquitin E3 Ligase. <i>Journal of Biological Chemistry</i> , 2013, 288, 17803-17811.	3.4	17
39	Striatal-Enriched Protein Tyrosine Phosphatase in Alzheimer's Disease. <i>Advances in Pharmacology</i> , 2012, 64, 303-325.	2.0	20
40	A molecular characterization of the choroid plexus and stress-induced gene regulation. <i>Translational Psychiatry</i> , 2012, 2, e139-e139.	4.8	67
41	Regulator of calmodulin signaling knockout mice display anxiety-like behavior and motivational deficits. <i>European Journal of Neuroscience</i> , 2012, 35, 300-308.	2.6	18
42	Phosphodiesterase 4 inhibition enhances the dopamine D1 receptor/PKA/DARPP-32 signaling cascade in frontal cortex. <i>Psychopharmacology</i> , 2012, 219, 1065-1079.	3.1	52
43	Functional Genomic and Proteomic Analysis Reveals Disruption of Myelin-Related Genes and Translation in a Mouse Model of Early Life Neglect. <i>Frontiers in Psychiatry</i> , 2011, 2, 18.	2.6	52
44	Beyond the dopamine receptor: regulation and roles of serine/threonine protein phosphatases. <i>Frontiers in Neuroanatomy</i> , 2011, 5, 50.	1.7	73
45	Reduced levels of the tyrosine phosphatase STEP block beta amyloid-mediated GluA1/GluA2 receptor internalization. <i>Journal of Neurochemistry</i> , 2011, 119, 664-672.	3.9	49
46	Flexibility in the PP1:spinophilin holoenzyme. <i>FEBS Letters</i> , 2011, 585, 36-40.	2.8	21
47	Protein Kinase C-Dependent Dephosphorylation of Tyrosine Hydroxylase Requires the B56 ^γ Heterotrimeric Form of Protein Phosphatase 2A. <i>PLoS ONE</i> , 2011, 6, e26292.	2.5	21
48	Protein Phosphatase 2A Interacts with the Na ⁺ ,K ⁺ -ATPase and Modulates Its Trafficking by Inhibition of Its Association with Arrestin. <i>PLoS ONE</i> , 2011, 6, e29269.	2.5	25
49	Signaling pathways controlling the phosphorylation state of WAVE1, a regulator of actin polymerization. <i>Journal of Neurochemistry</i> , 2010, 114, 182-190.	3.9	22
50	Spinophilin directs protein phosphatase 1 specificity by blocking substrate binding sites. <i>Nature Structural and Molecular Biology</i> , 2010, 17, 459-464.	8.2	181
51	Dopamine-Dependent Tuning of Striatal Inhibitory Synaptogenesis. <i>Journal of Neuroscience</i> , 2010, 30, 2935-2950.	3.6	35
52	Genetic reduction of striatal-enriched tyrosine phosphatase (STEP) reverses cognitive and cellular deficits in an Alzheimer's disease mouse model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 19014-19019.	7.1	179
53	cAMP-stimulated Protein Phosphatase 2A Activity Associated with Muscle A Kinase-anchoring Protein (mAKAP) Signaling Complexes Inhibits the Phosphorylation and Activity of the cAMP-specific Phosphodiesterase PDE4D3. <i>Journal of Biological Chemistry</i> , 2010, 285, 11078-11086.	3.4	78
54	Forebrain overexpression of CK1 ^β leads to down-regulation of dopamine receptors and altered locomotor activity reminiscent of ADHD. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 4401-4406.	7.1	48

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55	Variability of Distribution of Ca ²⁺ /Calmodulin-Dependent Kinase II at Mixed Synapses on the Mauthner Cell: Colocalization and Association with Connexin 35. <i>Journal of Neuroscience</i> , 2010, 30, 9488-9499.	3.6	31
56	A β -Mediated NMDA Receptor Endocytosis in Alzheimer's Disease Involves Ubiquitination of the Tyrosine Phosphatase STEP ₆₁ . <i>Journal of Neuroscience</i> , 2010, 30, 5948-5957.	3.6	198
57	Localization of dopamine- and cAMP-regulated phosphoprotein-32 and inhibitor-1 in area 9 of Macaca mulatta prefrontal cortex. <i>Neuroscience</i> , 2010, 167, 428-438.	2.3	11
58	Evidence for the Involvement of Lfc and Tctex-1 in Axon Formation. <i>Journal of Neuroscience</i> , 2010, 30, 6793-6800.	3.6	36
59	Dual involvement of G-substrate in motor learning revealed by gene deletion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 3525-3530.	7.1	29
60	Phosphorylation of Rap1GAP, a striatally enriched protein, by protein kinase A controls Rap1 activity and dendritic spine morphology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 3531-3536.	7.1	60
61	Wnt-5a-induced Phosphorylation of DARPP-32 Inhibits Breast Cancer Cell Migration in a CREB-dependent Manner. <i>Journal of Biological Chemistry</i> , 2009, 284, 27533-27543.	3.4	70
62	CK2 negatively regulates G β signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 14096-14101.	7.1	31
63	Methylphenidate-induced dendritic spine formation and δ -FosB expression in nucleus accumbens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 2915-2920.	7.1	107
64	Phosphorylation of the amino-terminal region of X11L regulates its interaction with APP. <i>Journal of Neurochemistry</i> , 2009, 109, 465-475.	3.9	14
65	An immunocytochemical assay to detect human CFTR expression following gene transfer. <i>Molecular and Cellular Probes</i> , 2009, 23, 272-280.	2.1	10
66	PP1-mediated dephosphorylation of phosphoproteins at mitotic exit is controlled by inhibitor-1 and PP1 phosphorylation. <i>Nature Cell Biology</i> , 2009, 11, 644-651.	10.3	218
67	Prior chronic cocaine exposure in mice induces persistent alterations in cognitive function. <i>Behavioural Pharmacology</i> , 2009, 20, 695-704.	1.7	27
68	PP1 β and PPP1R11 Are Parts of a Multimeric Complex in Developing Testicular Germ Cells in which their Steady State Levels Are Reciprocally Related. <i>PLoS ONE</i> , 2009, 4, e4861.	2.5	27
69	Role of Calcineurin and Protein Phosphatase-2A in the Regulation of DARPP-32 Dephosphorylation in Neostriatal Neurons. <i>Journal of Neurochemistry</i> , 2008, 72, 2015-2021.	3.9	108
70	Subcellular distribution of the Rho GEF Lfc in primate prefrontal cortex: Effect of neuronal activation. <i>Journal of Comparative Neurology</i> , 2008, 508, 927-939.	1.6	9
71	A phosphatase cascade by which rewarding stimuli control nucleosomal response. <i>Nature</i> , 2008, 453, 879-884.	27.8	219
72	FGF acts as a co-transmitter through adenosine A2A receptor to regulate synaptic plasticity. <i>Nature Neuroscience</i> , 2008, 11, 1402-1409.	14.8	167

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73	Cocaine Regulates MEF2 to Control Synaptic and Behavioral Plasticity. <i>Neuron</i> , 2008, 59, 621-633.	8.1	246
74	Striatal dysregulation of Cdk5 alters locomotor responses to cocaine, motor learning, and dendritic morphology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 18561-18566.	7.1	49
75	CaM kinase α -induced phosphorylation of Drp1 regulates mitochondrial morphology. <i>Journal of Cell Biology</i> , 2008, 182, 573-585.	5.2	397
76	WAVE1 controls neuronal activity-induced mitochondrial distribution in dendritic spines. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 3112-3116.	7.1	99
77	Luteinizing Hormone Receptor Activation in Ovarian Granulosa Cells Promotes Protein Kinase A-Dependent Dephosphorylation of Microtubule-Associated Protein 2D. <i>Molecular Endocrinology</i> , 2008, 22, 1695-1710.	3.7	31
78	The B''/PR72 subunit mediates Ca ²⁺ -dependent dephosphorylation of DARPP-32 by protein phosphatase 2A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 9876-9881.	7.1	99
79	A Calcium- and Calmodulin-Dependent Kinase α /Microtubule Affinity Regulating Kinase 2 Signaling Cascade Mediates Calcium-Dependent Neurite Outgrowth. <i>Journal of Neuroscience</i> , 2007, 27, 4413-4423.	3.6	64
80	Proteomic Analysis of Activity-Dependent Synaptic Plasticity in Hippocampal Neurons. <i>Journal of Proteome Research</i> , 2007, 6, 3203-3215.	3.7	40
81	Regulation of Alzheimer's disease amyloid-beta formation by casein kinase I. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 4159-4164.	7.1	164
82	Regulation of Protein Phosphatase Inhibitor-1 by Cyclin-dependent Kinase 5. <i>Journal of Biological Chemistry</i> , 2007, 282, 16511-16520.	3.4	27
83	Protein kinase A activates protein phosphatase 2A by phosphorylation of the B56 α subunit. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 2979-2984.	7.1	244
84	A mathematical tool for exploring the dynamics of biological networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 19169-19174.	7.1	34
85	Calcium-induced synergistic inhibition of a translational factor eEF2 in nerve growth cones. <i>Biochemical and Biophysical Research Communications</i> , 2007, 353, 244-250.	2.1	16
86	Phosphorylation of CREB and DARPP-32 during late LTP at hippocampal to prefrontal cortex synapses in vivo. <i>Synapse</i> , 2007, 61, 24-28.	1.2	26
87	Structural characterization of the neurabin sterile alpha motif domain. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007, 69, 192-198.	2.6	5
88	Disruption of reelin signaling attenuates methamphetamine-induced hyperlocomotion. <i>European Journal of Neuroscience</i> , 2007, 25, 3376-3384.	2.6	24
89	Expression of PKC substrate proteins, GAP α 43 and neurogranin, is downregulated by cAMP signaling and alterations in synaptic activity. <i>European Journal of Neuroscience</i> , 2007, 26, 3043-3053.	2.6	11
90	Orbitofrontal Cortex and Cognitive α Motivational Impairments in Psychostimulant Addiction. <i>Annals of the New York Academy of Sciences</i> , 2007, 1121, 610-638.	3.8	51

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91	Discovery of Protein Phosphatase 2C Inhibitors by Virtual Screening. Journal of Medicinal Chemistry, 2006, 49, 1658-1667.	6.4	65
92	Role for the PP2A/B56 β Phosphatase in Regulating 14-3-3 Release from Cdc25 to Control Mitosis. Cell, 2006, 127, 759-773.	28.9	183
93	D1 receptor modulation of memory retrieval performance is associated with changes in pCREB and pDARPP-32 in rat prefrontal cortex. Behavioural Brain Research, 2006, 171, 127-133.	2.2	62
94	Synaptic plasticity: one STEP at a time. Trends in Neurosciences, 2006, 29, 452-458.	8.6	116
95	2-Deoxyglucose and NMDA inhibit protein synthesis in neurons and regulate phosphorylation of elongation factor-2 by distinct mechanisms. Journal of Neurochemistry, 2006, 96, 815-824.	3.9	14
96	Dual regulation of translation initiation and peptide chain elongation during BDNF-induced LTP in vivo: evidence for compartment-specific translation control. Journal of Neurochemistry, 2006, 99, 1328-1337.	3.9	90
97	Oligomerization states of the association domain and the holoenzyme of Ca ²⁺ /CaM kinase II. FEBS Journal, 2006, 273, 682-694.	4.7	92
98	Phosphorylation of WAVE1 regulates actin polymerization and dendritic spine morphology. Nature, 2006, 442, 814-817.	27.8	289
99	In vivo phosphorylation of CFTR promotes formation of a nucleotide-binding domain heterodimer. EMBO Journal, 2006, 25, 4728-4739.	7.8	171
100	Assessment of cognitive function in the heterozygous reeler mouse. Psychopharmacology, 2006, 189, 95-104.	3.1	88
101	Phosphorylation of DARPP-32 regulates breast cancer cell migration downstream of the receptor tyrosine kinase DDR1. Experimental Cell Research, 2006, 312, 4011-4018.	2.6	52
102	Cocaine-induced dendritic spine formation in D1 and D2 dopamine receptor-containing medium spiny neurons in nucleus accumbens. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3399-3404.	7.1	312
103	Allosteric changes of the NMDA receptor trap diffusible dopamine 1 receptors in spines. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 762-767.	7.1	115
104	Cocaine Self-Administration in Mice Is Inversely Related to Phosphorylation at Thr34 (Protein Kinase A) Tj ETQq0 0 Q rgBT /Overlock 10 T	3.6	51
105	Thermodynamics of CFTR Channel Gating: A Spreading Conformational Change Initiates an Irreversible Gating Cycle. Journal of General Physiology, 2006, 128, 523-533.	1.9	54
106	Phosphorylation of Protein Phosphatase Inhibitor-1 by Protein Kinase C. Journal of Biological Chemistry, 2006, 281, 24322-24335.	3.4	24
107	Phosphorylation of DARPP-32 at Threonine-34 is Required for Cocaine Action. Neuropsychopharmacology, 2006, 31, 555-562.	5.4	90
108	Control of the CFTR channel's gates. Biochemical Society Transactions, 2005, 33, 1003.	3.4	31

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109	Regulation of spinophilin Ser94 phosphorylation in neostriatal neurons involves both DARPP-32-dependent and independent pathways. <i>Journal of Neurochemistry</i> , 2005, 95, 1642-1652.	3.9	9
110	A molecular switch for translational control in taste memory consolidation. <i>European Journal of Neuroscience</i> , 2005, 22, 2560-2568.	2.6	80
111	Regulation of NMDA receptor trafficking by amyloid- β . <i>Nature Neuroscience</i> , 2005, 8, 1051-1058.	14.8	1,417
112	CFTR channel opening by ATP-driven tight dimerization of its nucleotide-binding domains. <i>Nature</i> , 2005, 433, 876-880.	27.8	385
113	Structural Domains Involved in the Regulation of Transmitter Release by Synapsins. <i>Journal of Neuroscience</i> , 2005, 25, 2658-2669.	3.6	134
114	Nicotine Regulates DARPP-32 (Dopamine- and cAMP-Regulated Phosphoprotein of 32 kDa) Phosphorylation at Multiple Sites in Neostriatal Neurons. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2005, 315, 872-878.	2.5	35
115	Channel Function Is Dissociated from the Intrinsic Kinase Activity and Autophosphorylation of TRPM7/ChaK1. <i>Journal of Biological Chemistry</i> , 2005, 280, 20793-20803.	3.4	168
116	Phosphorylation of spinophilin by ERK and cyclin-dependent PK 5 (Cdk5). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 3489-3494.	7.1	48
117	Regulation of a protein phosphatase cascade allows convergent dopamine and glutamate signals to activate ERK in the striatum. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 491-496.	7.1	558
118	Increased activity of cyclin-dependent kinase 5 leads to attenuation of cocaine-mediated dopamine signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1737-1742.	7.1	81
119	Preferential Phosphorylation of R-domain Serine 768 Dampens Activation of CFTR Channels by PKA. <i>Journal of General Physiology</i> , 2005, 125, 171-186.	1.9	66
120	Functional Roles of Nonconserved Structural Segments in CFTR's NH2-terminal Nucleotide Binding Domain. <i>Journal of General Physiology</i> , 2005, 125, 43-55.	1.9	55
121	Regulation of the interaction between PIPK β and talin by proline-directed protein kinases. <i>Journal of Cell Biology</i> , 2005, 168, 789-799.	5.2	106
122	Charge Screening by Internal pH and Polyvalent Cations as a Mechanism for Activation, Inhibition, and Rundown of TRPM7/MIC Channels. <i>Journal of General Physiology</i> , 2005, 126, 499-514.	1.9	117
123	Glutamate regulation of DARPP-32 phosphorylation in neostriatal neurons involves activation of multiple signaling cascades. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1199-1204.	7.1	128
124	Quantitative Analysis of Protein Phosphorylation in Mouse Brain by Hypothesis-Driven Multistage Mass Spectrometry. <i>Analytical Chemistry</i> , 2005, 77, 7845-7851.	6.5	32
125	Structure of the Autoinhibited Kinase Domain of CaMKII and SAXS Analysis of the Holoenzyme. <i>Cell</i> , 2005, 123, 849-860.	28.9	293
126	The Rho-Specific GEF Lfc Interacts with Neurabin and Spinophilin to Regulate Dendritic Spine Morphology. <i>Neuron</i> , 2005, 47, 85-100.	8.1	132

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127	DARPP-32 mediates the actions of multiple drugs of abuse. AAPS Journal, 2005, 7, E353-E360.	4.4	152
128	Elevated glucose activates protein synthesis in cultured cardiac myocytes. Metabolism: Clinical and Experimental, 2005, 54, 1453-1460.	3.4	40
129	Regulation of synaptojanin 1 by cyclin-dependent kinase 5 at synapses. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 546-551.	7.1	172
130	Molecular characterization of recombinant mouse adenosine kinase and evaluation as a target for protein phosphorylation. FEBS Journal, 2004, 271, 3547-3555.	0.2	26
131	Spinophilin is phosphorylated by Ca ²⁺ /calmodulin-dependent protein kinase II resulting in regulation of its binding to F-actin. Journal of Neurochemistry, 2004, 90, 317-324.	3.9	56
132	Differential regulation of dopamine D1 and D2 signaling by nicotine in neostriatal neurons. Journal of Neurochemistry, 2004, 90, 1094-1103.	3.9	68
133	PKC- δ regulates cardiac contractility and propensity toward heart failure. Nature Medicine, 2004, 10, 248-254.	30.7	551
134	Restoration of Protein Synthesis in Heart and Skeletal Muscle After Withdrawal of Alcohol. Alcoholism: Clinical and Experimental Research, 2004, 28, 517-525.	2.4	36
135	Letter to the Editor: ¹ H, ¹⁵ N, and ¹³ C resonance assignments of DARPP-32 (dopamine and cAMP-regulated) Tj ETQq1 1 0.784314 rgBT (g) NMR, 2004, 28, 413-414.	2.8	10
136	Regulation of ania-6 splice variants by distinct signaling pathways in striatal neurons. Journal of Neurochemistry, 2004, 86, 153-164.	3.9	27
137	A Network of Control Mediated by Regulator of Calcium/Calmodulin-Dependent Signaling. Science, 2004, 306, 698-701.	12.6	92
138	DARPP-32: An Integrator of Neurotransmission. Annual Review of Pharmacology and Toxicology, 2004, 44, 269-296.	9.4	639
139	Cytoplasmic localization of calcium/calmodulin-dependent protein kinase I- δ depends on a nuclear export signal in its regulatory domain. FEBS Letters, 2004, 566, 275-280.	2.8	30
140	The role of DARPP-32 in the actions of drugs of abuse. Neuropharmacology, 2004, 47, 14-23.	4.1	117
141	A new model of the tautomycin-PP1 complex that is not analogous to the corresponding okadaic acid structure. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 1601-1605.	2.2	13
142	NMDA-mediated activation of the tyrosine phosphatase STEP regulates the duration of ERK signaling. Nature Neuroscience, 2003, 6, 34-42.	14.8	294
143	The selective inhibition of phosphatases by natural toxins: the anhydride domain of tautomycin is not a primary factor in controlling PP1/PP2A selectivity. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 1597-1600.	2.2	20
144	Regulation of AMPA receptor dephosphorylation by glutamate receptor agonists. Neuropharmacology, 2003, 45, 703-713.	4.1	62

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145	Thr123 of rat G-substrate contributes to its action as a protein phosphatase inhibitor. Neuroscience Research, 2003, 45, 79-89.	1.9	34
146	Adenylyl cyclase-dependent form of chemical long-term potentiation triggers translational regulation at the elongation step. Neuroscience, 2003, 116, 743-752.	2.3	70
147	Crystal Structure of a Tetradecameric Assembly of the Association Domain of Ca ²⁺ /Calmodulin-Dependent Kinase II. Molecular Cell, 2003, 11, 1241-1251.	9.7	164
148	On the Mechanism of MgATP-dependent Gating of CFTR Cl ⁻ Channels. Journal of General Physiology, 2003, 121, 17-36.	1.9	182
149	Protein phosphatase 2C binds selectively to and dephosphorylates metabotropic glutamate receptor 3. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 16006-16011.	7.1	67
150	Glucose Regulates EF-2 Phosphorylation and Protein Translation by a Protein Phosphatase-2A-dependent Mechanism in INS-1-derived 832/13 Cells. Journal of Biological Chemistry, 2003, 278, 18177-18183.	3.4	27
151	Prolonged Nonhydrolytic Interaction of Nucleotide with CFTR's NH ₂ -terminal Nucleotide Binding Domain and its Role in Channel Gating. Journal of General Physiology, 2003, 122, 333-348.	1.9	139
152	Phosphorylation of Spinophilin Modulates Its Interaction with Actin Filaments. Journal of Biological Chemistry, 2003, 278, 1186-1194.	3.4	77
153	PNUTS, a Protein Phosphatase 1 (PP1) Nuclear Targeting Subunit. Journal of Biological Chemistry, 2003, 278, 13819-13828.	3.4	66
154	Metabotropic mGlu5 receptors regulate adenosine A _{2A} receptor signaling. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1322-1327.	7.1	135
155	Mechanism of Regulation of Casein Kinase I Activity by Group I Metabotropic Glutamate Receptors. Journal of Biological Chemistry, 2002, 277, 45393-45399.	3.4	79
156	Nerve growth factor controls GAP-43 mRNA stability via the phosphoprotein ARPP-19. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12427-12431.	7.1	55
157	Distinct Mg ²⁺ -dependent Steps Rate Limit Opening and Closing of a Single CFTR Cl ⁻ Channel. Journal of General Physiology, 2002, 119, 545-559.	1.9	21
158	A Direct Test of the Reductionist Approach to Structural Studies of Calmodulin Activity. Journal of Biological Chemistry, 2002, 277, 16351-16354.	3.4	43
159	A Novel cAMP-Stimulated Pathway in Protein Phosphatase 2A Activation. Journal of Pharmacology and Experimental Therapeutics, 2002, 302, 111-118.	2.5	94
160	The Carboxyl-Terminus of BACE Contains a Sorting Signal That Regulates BACE Trafficking but Not the Formation of Total A β . Molecular and Cellular Neurosciences, 2002, 19, 175-185.	2.2	106
161	N-Methyl-D-aspartate receptor activation inhibits protein synthesis in cortical neurons independently of its ionic permeability properties. Neuroscience, 2002, 114, 859-867.	2.3	10
162	Regulation of DARPP-32 dephosphorylation at PKA- and Cdk5-sites by NMDA and AMPA receptors: distinct roles of calcineurin and protein phosphatase-2A. Journal of Neurochemistry, 2002, 81, 832-841.	3.9	133

#	ARTICLE	IF	CITATIONS
163	Zinc-induced inhibition of protein synthesis and reduction of connexin-43 expression and intercellular communication in mouse cortical astrocytes. <i>European Journal of Neuroscience</i> , 2002, 16, 1037-1044.	2.6	10
164	Involvement of DARPP-32 phosphorylation in the stimulant action of caffeine. <i>Nature</i> , 2002, 418, 774-778.	27.8	174
165	The Actin-Binding Domain of Spinophilin is Necessary and Sufficient for Targeting to Dendritic Spines. <i>NeuroMolecular Medicine</i> , 2002, 2, 61-70.	3.4	38
166	Regulation of cyclin-dependent kinase 5 and casein kinase 1 by metabotropic glutamate receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 11062-11068.	7.1	121
167	A Novel Cyclin Provides a Link between Dopamine and RNA Processing. <i>Neuron</i> , 2001, 32, 174-176.	8.1	12
168	Crystal Structure of the Atypical Protein Kinase Domain of a TRP Channel with Phosphotransferase Activity. <i>Molecular Cell</i> , 2001, 7, 1047-1057.	9.7	248
169	Inhibition of protein synthesis in cortical neurons during exposure to hydrogen peroxide. <i>Journal of Neurochemistry</i> , 2001, 76, 1080-1088.	3.9	35
170	Auto-inhibition of Ca ²⁺ /calmodulin-dependent protein kinase II by its ATP-binding domain. <i>Journal of Neurochemistry</i> , 2001, 76, 1066-1072.	3.9	11
171	Changes in the phosphorylation of initiation factor eIF-2 γ , elongation factor eEF-2 and p70 S6 kinase after transient focal cerebral ischaemia in mice. <i>Journal of Neurochemistry</i> , 2001, 78, 779-787.	3.9	100
172	TARPP, a novel protein that accompanies TCR gene rearrangement and thymocyte education. <i>European Journal of Immunology</i> , 2001, 31, 1141-1149.	2.9	25
173	Backbone 1H, 15N, and 13C resonance assignments of ARPP-19. <i>Journal of Biomolecular NMR</i> , 2001, 19, 383-384.	2.8	8
174	Effects of chronic exposure to cocaine are regulated by the neuronal protein Cdk5. <i>Nature</i> , 2001, 410, 376-380.	27.8	442
175	Protein phosphatase 1 regulation by inhibitors and targeting subunits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 3080-3085.	7.1	67
176	NMDA receptor-mediated control of protein synthesis at developing synapses. <i>Nature Neuroscience</i> , 2000, 3, 211-216.	14.8	338
177	Regulation of protein phosphatase-1. <i>Chemistry and Biology</i> , 2000, 7, R13-R23.	6.0	161
178	Backbone 1H, 15N, and 13C resonance assignments of inhibitor-2 – a protein inhibitor of protein phosphatase-1. <i>Journal of Biomolecular NMR</i> , 2000, 17, 359-360.	2.8	15
179	Cellular Mechanisms Regulating Protein Phosphatase-1. <i>Journal of Biological Chemistry</i> , 2000, 275, 18670-18675.	3.4	53
180	Severe deficiencies in dopamine signaling in presymptomatic Huntington's disease mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 6809-6814.	7.1	263

#	ARTICLE	IF	CITATIONS
181	Amplification of dopaminergic signaling by a positive feedback loop. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 12840-12845.	7.1	218
182	Severed Channels Probe Regulation of Gating of Cystic Fibrosis Transmembrane Conductance Regulator by Its Cytoplasmic Domains. Journal of General Physiology, 2000, 116, 477-500.	1.9	117
183	Drugs of abuse modulate the phosphorylation of ARPP-21, a cyclic AMP-regulated phosphoprotein enriched in the basal ganglia. Neuropharmacology, 2000, 39, 1637-1644.	4.1	36
184	Neuron-Specific Phosphorylation of Alzheimer's Amyloid Precursor Protein by Cyclin-Dependent Kinase 5. Journal of Neurochemistry, 2000, 75, 1085-1091.	3.9	212
185	Severed Molecules Functionally Define the Boundaries of the Cystic Fibrosis Transmembrane Conductance Regulator's Nh2-Terminal Nucleotide Binding Domain. Journal of General Physiology, 2000, 116, 163-180.	1.9	73
186	Zinc Inhibits Protein Synthesis in Neurons. Journal of Biological Chemistry, 1999, 274, 32433-32438.	3.4	32
187	Characterization of the Inhibition of Protein Phosphatase-1 by DARPP-32 and Inhibitor-2. Journal of Biological Chemistry, 1999, 274, 7870-7878.	3.4	118
188	Molecular identification of human G-substrate, a possible downstream component of the cGMP-dependent protein kinase cascade in cerebellar Purkinje cells. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 2467-2472.	7.1	76
189	Inhibition of the Ca ²⁺ /Calmodulin-dependent Protein Kinase I Cascade by cAMP-dependent Protein Kinase. Journal of Biological Chemistry, 1999, 274, 10086-10093.	3.4	75
190	Requirement for DARPP-32 in mediating effect of dopamine D2 receptor activation. European Journal of Neuroscience, 1999, 11, 2589-2592.	2.6	25
191	A 127-kDa Protein (UV-DBB) Binds to the Cytoplasmic Domain of the Alzheimer's Amyloid Precursor Protein. Journal of Neurochemistry, 1999, 72, 549-556.	3.9	45
192	The design, synthesis, and biological evaluation of analogues of the serine-threonine protein phosphatase 1 and 2A selective inhibitor microcystin LA: rational modifications imparting PP1 selectivity. Bioorganic and Medicinal Chemistry, 1999, 7, 543-564.	3.0	42
193	[Ca ²⁺] determines the effects of protein kinases A and C on activity of rat renal Na ⁺ ,K ⁺ -ATPase. Journal of Physiology, 1999, 518, 37-46.	2.9	65
194	Protein phosphatase 1 modulation of neostriatal AMPA channels: regulation by DARPP-32 and spinophilin. Nature Neuroscience, 1999, 2, 13-17.	14.8	280
195	Phosphorylation of DARPP-32 by Cdk5 modulates dopamine signalling in neurons. Nature, 1999, 402, 669-671.	27.8	538
196	Modulation of GT-1 DNA-binding activity by calcium-dependent phosphorylation. Plant Molecular Biology, 1999, 40, 373-386.	3.9	42
197	Modulation of a calcium/calmodulin-dependent protein kinase cascade by retinoic acid during neutrophil maturation. Experimental Hematology, 1999, 27, 1682-1690.	0.4	15
198	Beyond the Dopamine Receptor. Neuron, 1999, 23, 435-447.	8.1	722

#	ARTICLE	IF	CITATIONS
199	The expression of Ca ²⁺ /calmodulin-dependent protein kinase I in rat retina is regulated by light stimulation. <i>Vision Research</i> , 1999, 39, 3165-3173.	1.4	4
200	Phosphorylation of the Cytoplasmic Domain of Alzheimer's β -Amyloid Precursor Protein at Ser655 by a Novel Protein Kinase. <i>Biochemical and Biophysical Research Communications</i> , 1999, 258, 300-305.	2.1	15
201	Regulation of Na ⁺ , K ⁺ -ATPase Isoforms in Rat Neostriatum by Dopamine and Protein Kinase C. <i>Journal of Neurochemistry</i> , 1999, 73, 1492-1501.	3.9	69
202	The DARPP-32/protein phosphatase-1 cascade: a model for signal integration1Published on the World Wide Web on 22 January 1998.1. <i>Brain Research Reviews</i> , 1998, 26, 274-284.	9.0	152
203	Characterization of the Mechanism of Regulation of Ca ²⁺ / Calmodulin-dependent Protein Kinase I by Calmodulin and by Ca ²⁺ /Calmodulin-dependent Protein Kinase Kinase. <i>Journal of Biological Chemistry</i> , 1998, 273, 21473-21481.	3.4	75
204	Isolation and Characterization of PNUTS, a Putative Protein Phosphatase 1 Nuclear Targeting Subunit. <i>Journal of Biological Chemistry</i> , 1998, 273, 4089-4095.	3.4	138
205	Actions of Genistein on Cystic Fibrosis Transmembrane Conductance Regulator Channel Gating. <i>Journal of General Physiology</i> , 1998, 111, 477-490.	1.9	156
206	Ca ²⁺ /calmodulin-dependent kinase II mediates simultaneous enhancement of gap-junctional conductance and glutamatergic transmission. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 13272-13277.	7.1	146
207	Characterization of the interaction between DARPP-32 and protein phosphatase 1 (PP-1): DARPP-32 peptides antagonize the interaction of PP-1 with binding proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 3536-3541.	7.1	118
208	The Regulation of Glycogen Synthase by Protein Phosphatase 1 in 3T3-L1 Adipocytes. <i>Journal of Biological Chemistry</i> , 1997, 272, 29698-29703.	3.4	52
209	Phosphorylation of Connexin43 and the Regulation of Neonatal Rat Cardiac Myocyte Gap Junctions. <i>Journal of Molecular and Cellular Cardiology</i> , 1997, 29, 2131-2145.	1.9	144
210	Mutation of the Protein Kinase C Phosphorylation Site on Rat β 1 Na ⁺ ,K ⁺ -ATPase Alters Regulation of Intracellular Na ⁺ and pH and Influences Cell Shape and Adhesiveness. <i>Journal of Biological Chemistry</i> , 1997, 272, 20179-20184.	3.4	56
211	Site-directed mutagenesis of amino acid residues of protein phosphatase 1 involved in catalysis and inhibitor binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 3530-3535.	7.1	77
212	Cell cycle-dependent phosphorylation of mammalian protein phosphatase 1 by cdc2 kinase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 2168-2173.	7.1	198
213	A molecular modeling analysis of the binding interactions between the okadaic acid class of natural product inhibitors and the ser-thr phosphatases, PP1 and PP2A. <i>Bioorganic and Medicinal Chemistry</i> , 1997, 5, 1751-1773.	3.0	50
214	Structural Basis for the Autoinhibition of Calcium/Calmodulin-Dependent Protein Kinase I. <i>Cell</i> , 1996, 84, 875-887.	28.9	327
215	Structure, Regulation, and Function of Calcium/Calmodulin-Dependent Protein Kinase I. <i>Advances in Pharmacology</i> , 1996, 36, 251-275.	2.0	21
216	Phosphorylation by protein kinase C of serine-23 of the alpha-1 subunit of rat Na ⁺ ,K ⁽⁺⁾ -ATPase affects its conformational equilibrium.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 9132-9137.	7.1	69

#	ARTICLE	IF	CITATIONS
217	Developmental expression of MARCKS and protein kinase C in mice in relation to the exencephaly resulting from MARCKS deficiency. <i>Developmental Brain Research</i> , 1996, 96, 62-75.	1.7	39
218	Activation of a Calcium-Calmodulin-dependent Protein Kinase I Cascade in PC12 Cells. <i>Journal of Biological Chemistry</i> , 1996, 271, 20930-20934.	3.4	37
219	Amyloid β Peptide Formation in Cell-free Preparations. <i>Journal of Biological Chemistry</i> , 1996, 271, 24670-24674.	3.4	47
220	Inhibition of Tumor Necrosis Factor Signal Transduction in Endothelial Cells by Dimethylaminopurine. <i>Journal of Biological Chemistry</i> , 1996, 271, 28624-28629.	3.4	30
221	Isotype-specific Activation of Cystic Fibrosis Transmembrane Conductance Regulator-Chloride Channels by cGMP-dependent Protein Kinase II. <i>Journal of Biological Chemistry</i> , 1995, 270, 26626-26631.	3.4	129
222	Phosphorylation of DARPP-32, a Dopamine- and cAMP-regulated Phosphoprotein, by Casein Kinase I in Vitro and in Vivo. <i>Journal of Biological Chemistry</i> , 1995, 270, 8772-8778.	3.4	70
223	The Regulatory Region of Calcium/Calmodulin-dependent Protein Kinase I Contains Closely Associated Autoinhibitory and Calmodulin-binding Domains. <i>Journal of Biological Chemistry</i> , 1995, 270, 23851-23859.	3.4	63
224	Mechanism of Inhibition of Protein Phosphatase 1 by DARPP-32: Studies with Recombinant DARPP-32 and Synthetic Peptides. <i>Biochemical and Biophysical Research Communications</i> , 1995, 206, 652-658.	2.1	63
225	A Role for Calcineurin (Protein Phosphatase-2B) in the Regulation of Glutamate Release. <i>Biochemical and Biophysical Research Communications</i> , 1995, 212, 609-616.	2.1	45
226	Regulation of CFTR channel gating. <i>Trends in Biochemical Sciences</i> , 1994, 19, 513-518.	7.5	90
227	Ca ²⁺ /Calmodulin-Dependent Protein Kinase V and I May Form a Family of Isoforms. <i>Biochemical and Biophysical Research Communications</i> , 1994, 201, 1561-1566.	2.1	10
228	Coupling of CFTR Cl ⁻ channel gating to an ATP hydrolysis cycle. <i>Neuron</i> , 1994, 12, 473-482.	8.1	220
229	Rapamycin selectively inhibits translation of mRNAs encoding elongation factors and ribosomal proteins.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994, 91, 11477-11481.	7.1	338
230	Regulation of the gating of cystic fibrosis transmembrane conductance regulator Cl channels by phosphorylation and ATP hydrolysis.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994, 91, 4698-4702.	7.1	276
231	Protein Phosphorylation Regulates Relative Utilization of Processing Pathways for Alzheimer β /A4 Amyloid Precursor Protein^a. <i>Annals of the New York Academy of Sciences</i> , 1993, 695, 117-121.	3.8	31
232	Increased phosphorylation of elongation factor 2 in Alzheimer's disease. <i>Molecular Brain Research</i> , 1992, 15, 319-326.	2.3	22
233	Immunocytochemical localization of phosphatase inhibitor-1 in rat brain. <i>Journal of Comparative Neurology</i> , 1991, 310, 170-188.	1.6	46
234	Phosphorylation of connexin 32, a hepatocyte gap-junction protein, by cAMP-dependent protein kinase, protein kinase C and Ca ²⁺ /calmodulin-dependent protein kinase II. <i>FEBS Journal</i> , 1990, 192, 263-273.	0.2	171

#	ARTICLE	IF	CITATIONS
235	Cholecystokinin induces a decrease in Ca ²⁺ current in snail neurons that appears to be mediated by protein kinase C. <i>Nature</i> , 1987, 325, 809-811.	27.8	96
236	cGMP-dependent protein kinase enhances Ca ²⁺ current and potentiates the serotonin-induced Ca ²⁺ current increase in snail neurones. <i>Nature</i> , 1986, 323, 812-814.	27.8	155
237	Cyclic Nucleotide-Dependent Protein Kinases and Some Major Substrates in the Rat Cerebellum After Neonatal X-Irradiation. <i>Journal of Neurochemistry</i> , 1983, 40, 577-581.	3.9	87
238	Microinjection of catalytic subunit of cyclic AMP-dependent protein kinase enhances calcium action potentials of bag cell neurons in cell culture. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1980, 77, 7487-7491.	7.1	278
239	The Role of Calmodulin in the Structure and Regulation of Phosphorylase Kinase from Rabbit Skeletal Muscle. <i>FEBS Journal</i> , 1979, 100, 329-337.	0.2	259
240	Identification of the Ca ²⁺ -dependent modulator protein as the fourth subunit of rabbit skeletal muscle phosphorylase kinase. <i>FEBS Letters</i> , 1978, 92, 287-293.	2.8	620