Miles D Houslay

List of Publications by Year
in descending order

212 papers	18,412 citations	10986 71 h-index	13771 129 g-index
214 all docs	214 docs citations	214 times ranked	12335 citing authors

#	Article	IF	Citations
1	PDE4 cAMP phosphodiesterases: modular enzymes that orchestrate signalling cross-talk, desensitization and compartmentalization. Biochemical Journal, 2003, 370, 1-18.	3.7	723
2	DISC1 and PDE4B Are Interacting Genetic Factors in Schizophrenia That Regulate cAMP Signaling. Science, 2005, 310, 1187-1191.	12.6	605
3	Keynote review: Phosphodiesterase-4 as a therapeutic target. Drug Discovery Today, 2005, 10, 1503-1519.	6.4	604
4	Behavioral Phenotypes of Disc1 Missense Mutations in Mice. Neuron, 2007, 54, 387-402.	8.1	499
5	Targeting of Cyclic AMP Degradation to beta 2-Adrenergic Receptors by beta -Arrestins. Science, 2002, 298, 834-836.	12.6	476
6	Normal p21N-ras couples bombesin and other growth factor receptors to inositol phosphate production. Nature, 1986, 323, 173-176.	27.8	422
7	Underpinning compartmentalised cAMP signalling through targeted cAMP breakdown. Trends in Biochemical Sciences, 2010, 35, 91-100.	7.5	396
8	Activation of two signal-transduction systems in hepatocytes by glucagon. Nature, 1986, 323, 68-71.	27.8	386
9	Disrupted-in-Schizophrenia 1 (DISC1) regulates spines of the glutamate synapse via Rac1. Nature Neuroscience, 2010, 13, 327-332.	14.8	367
10	Â-Arrestin-mediated PDE4 cAMP phosphodiesterase recruitment regulates Â-adrenoceptor switching from Gs to Gi. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 940-945.	7.1	356
11	The RACK1 Scaffold Protein: A Dynamic Cog in Cell Response Mechanisms. Molecular Pharmacology, 2002, 62, 1261-1273.	2.3	343
12	Fluorescence Resonance Energy Transferâ€"Based Analysis of cAMP Dynamics in Live Neonatal Rat Cardiac Myocytes Reveals Distinct Functions of Compartmentalized Phosphodiesterases. Circulation Research, 2004, 95, 67-75.	4.5	341
13	Sleep deprivation impairs cAMP signalling in the hippocampus. Nature, 2009, 461, 1122-1125.	27.8	339
14	â€˜Crosstalkâ€™: a pivotal role for protein kinase C in modulating relationships between signal transduction pathways. FEBS Journal, 1991, 195, 9-27.	0.2	315
15	cAMP-Specific Phosphodiesterase-4 Enzymes in the Cardiovascular System. Circulation Research, 2007, 100, 950-966.	4.5	283
16	The Multienzyme PDE4 Cyclic Adenosine Monophosphateâ€"Specific Phosphodiesterase Family: Intracellular Targeting, Regulation, and Selective Inhibition by Compounds Exerting Anti-inflammatory and Antidepressant Actions. Advances in Pharmacology, 1998, 44, 225-342.	2.0	274
17	The MAP kinase ERK2 inhibits the cyclic AMP-specific phosphodiesterase HSPDE4D3 by phosphorylating it at Ser579. EMBO Journal, 1999, 18, 893-903.	7.8	269
18	The RACK1 Signaling Scaffold Protein Selectively Interacts with the cAMP-specific Phosphodiesterase PDE4D5 Isoform. Journal of Biological Chemistry, 1999, 274, 14909-14917.	3.4	268

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19	Compartmentalized Phosphodiesterase-2 Activity Blunts Î²-Adrenergic Cardiac Inotropy via an NO/cGMP-Dependent Pathway. Circulation Research, 2006, 98, 226-234.	4.5	252
20	Long PDE4 cAMP specific phosphodiesterases are activated by protein kinase A-mediated phosphorylation of a single serine residue in Upstream Conserved Region 1 (UCR1). British Journal of Pharmacology, 2002, 136, 421-433.	5.4	229
21	ERK2 Mitogen-activated Protein Kinase Binding, Phosphorylation, and Regulation of the PDE4D cAMP-specific Phosphodiesterases. Journal of Biological Chemistry, 2000, 275, 16609-16617.	3.4	215
22	PDE4 cAMP-specific phosphodiesterases. Progress in Molecular Biology and Translational Science, 2001, 69, 249-315.	1.9	215
23	A Complex between FAK, RACK1, and PDE4D5 Controls Spreading Initiation and Cancer Cell Polarity. Current Biology, 2010, 20, 1086-1092.	3.9	214
24	Sleep deprivation causes memory deficits by negatively impacting neuronal connectivity in hippocampal area CA1. ELife, 2016, 5, .	6.0	191
25	Cell-Type Specific Integration of Cross-Talk between Extracellular Signal-Regulated Kinase and cAMP Signaling. Molecular Pharmacology, 2000, 58, 659-668.	2.3	187
26	Compartmentalisation of phosphodiesterases and protein kinase A: opposites attract. FEBS Letters, 2005, 579, 3264-3270.	2.8	186
27	RNA Silencing Identifies PDE4D5 as the Functionally Relevant cAMP Phosphodiesterase Interacting with Î²Arrestin to Control the Protein Kinase A/AKAP79-mediated Switching of the Î²2-Adrenergic Receptor to Activation of ERK in HEK293B2 Cells. Journal of Biological Chemistry, 2005, 280, 33178-33189.	3.4	185
28	Protein Kinase A Type I and Type II Define Distinct Intracellular Signaling Compartments. Circulation Research, 2008, 103, 836-844.	4.5	185
29	DISC1-dependent switch from progenitor proliferation to migration in the developing cortex. Nature, 2011, 473, 92-96.	27.8	181
30	Integrating Cardiac PIP3 and cAMP Signaling through a PKA Anchoring Function of p110Î³. Molecular Cell, 2011, 42, 84-95.	9.7	174
31	PGE1 stimulation of HEK293 cells generates multiple contiguous domains with different [cAMP]: role of compartmentalized phosphodiesterases. Journal of Cell Biology, 2006, 175, 441-451.	5.2	171
32	cAMP-specific phosphodiesterase HSPDE4D3 mutants which mimic activation and changes in rolipram inhibition triggered by protein kinase A phosphorylation of Ser-54: generation of a molecular model. Biochemical Journal, 1998, 333, 139-149.	3.7	163
33	Attenuation of the Activity of the cAMP-specific Phosphodiesterase PDE4A5 by Interaction with the Immunophilin XAP2. Journal of Biological Chemistry, 2003, 278, 33351-33363.	3.4	149
34	Isoform-Selective Susceptibility of DISC1/Phosphodiesterase-4 Complexes to Dissociation by Elevated Intracellular cAMP Levels. Journal of Neuroscience, 2007, 27, 9513-9524.	3.6	149
35	Derivation of Endothelial Cells From Human Embryonic Stem Cells by Directed Differentiation. Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30, 1389-1397.	2.4	147
36	Sub-family selective actions in the ability of Erk2 MAP kinase to phosphorylate and regulate the activity of PDE4 cyclic AMP-specific phosphodiesterases. British Journal of Pharmacology, 2000, 131, 811-819.	5.4	146

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37	Insulin triggers cyclic AMP-dependent activation and phosphorylation of a plasma membrane cyclic AMP phosphodiesterase. Nature, 1980, 286, 904-906.	27.8	145
38	TAPAS-1, a Novel Microdomain within the Unique N-terminal Region of the PDE4A1 cAMP-specific Phosphodiesterase That Allows Rapid, Ca2+-triggered Membrane Association with Selectivity for Interaction with Phosphatidic Acid. Journal of Biological Chemistry, 2002, 277, 28298-28309.	3.4	145
39	Scanning peptide array analyses identify overlapping binding sites for the signalling scaffold proteins, Î²-arrestin and RACK1, in cAMP-specific phosphodiesterase PDE4D5. Biochemical Journal, 2006, 398, 23-36.	3.7	144
40	Compartmentalization of cAMP-Dependent Signaling by Phosphodiesterase-4D Is Involved in the Regulation of Vasopressin-Mediated Water Reabsorption in Renal Principal Cells. Journal of the American Society of Nephrology: JASN, 2007, 18, 199-212.	6.1	134
41	Action of rolipram on specific PDE4 cAMP phosphodiesterase isoforms and on the phosphorylation of cAMP-response-element-binding protein (CREB) and p38 mitogen-activated protein (MAP) kinase in U937 monocytic cells. Biochemical Journal, 2000, 347, 571-578.	3.7	127
42	The insulin receptor tyrosyl kinase phosphorylates holomeric forms of the guanine nucleotide regulatory proteins Giand Go. FEBS Letters, 1987, 212, 281-288.	2.8	126
43	Arrestin times for compartmentalised cAMP signalling and phosphodiesterase-4 enzymes. Current Opinion in Cell Biology, 2005, 17, 129-134.	5.4	120
44	The Cardiac IKs Potassium Channel Macromolecular Complex Includes the Phosphodiesterase PDE4D3. Journal of Biological Chemistry, 2009, 284, 9140-9146.	3.4	118
45	p75 neurotrophin receptor regulates tissue fibrosis through inhibition of plasminogen activation via a PDE4/cAMP/PKA pathway. Journal of Cell Biology, 2007, 177, 1119-1132.	5.2	116
46	Challenge of human Jurkat T-cells with the adenylate cyclase activator forskolin elicits major changes in cAMP phosphodiesterase (PDE) expression by up-regulating PDE3 and inducing PDE4D1 and PDE4D2 splice variants as well as down-regulating a novel PDE4A splice variant. Biochemical Journal, 1997, 321, 165-175.	3.7	112
47	EPAC and PKA allow cAMP dual control over DNA-PK nuclear translocation. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12791-12796.	7.1	109
48	Phosphorylation-dependent Interactions between ADAM15 Cytoplasmic Domain and Src Family Protein-tyrosine Kinases. Journal of Biological Chemistry, 2002, 277, 4999-5007.	3.4	108
49	Association with the SRC Family Tyrosyl Kinase LYN Triggers a Conformational Change in the Catalytic Region of Human cAMP-specific Phosphodiesterase HSPDE4A4B. Journal of Biological Chemistry, 1999, 274, 11796-11810.	3.4	104
50	UCR1 and UCR2 Domains Unique to the cAMP-specific Phosphodiesterase Family Form a Discrete Module via Electrostatic Interactions. Journal of Biological Chemistry, 2000, 275, 10349-10358.	3.4	104
51	In resting COS1 cells a dominant negative approach shows that specific, anchored PDE4 cAMP phosphodiesterase isoforms gate the activation, by basal cyclic AMP production, of AKAP-tethered protein kinase A type II located in the centrosomal region. Cellular Signalling, 2005, 17, 1158-1173.	3.6	102
52	Inferring Signaling Pathway Topologies from Multiple Perturbation Measurements of Specific Biochemical Species. Science Signaling, 2010, 3, ra20.	3.6	101
53	Differential expression of PDE4 cAMP phosphodiesterase isoforms in inflammatory cells of smokers with COPD, smokers without COPD, and nonsmokers. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2004, 287, L332-L343.	2.9	100
54	Structures of the four subfamilies of phosphodiesterase-4 provide insight into the selectivity of their inhibitors. Biochemical Journal, 2007, 408, 193-201.	3.7	100

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55	The SH3 domain of Src tyrosyl protein kinase interacts with the N-terminal splice region of the PDE4A cAMP-specific phosphodiesterase RPDE-6 (RNPDE4A5). Biochemical Journal, 1996, 318, 255-261.	3.7	97
56	The Unique Amino-terminal Region of the PDE4D5 cAMP Phosphodiesterase Isoform Confers Preferential Interaction with Î²-Arrestins. Journal of Biological Chemistry, 2003, 278, 49230-49238.	3.4	97
57	The Human Cyclic AMP-specific Phosphodiesterase PDE-46 (HSPDE4A4B) Expressed in Transfected COS7 Cells Occurs as Both Particulate and Cytosolic Species That Exhibit Distinct Kinetics of Inhibition by the Antidepressant Rolipram. Journal of Biological Chemistry, 1996, 271, 31334-31344.	3.4	95
58	Action of rolipram on specific PDE4 cAMP phosphodiesterase isoforms and on the phosphorylation of cAMP-response-element-binding protein (CREB) and p38 mitogen-activated protein (MAP) kinase in U937 monocytic cells. Biochemical Journal, 2000, 347, 571.	3.7	95
59	Membrane Localization of Cyclic Nucleotide Phosphodiesterase 3 (PDE3). Journal of Biological Chemistry, 2000, 275, 38749-38761.	3.4	94
60	Small Molecule AKAP-Protein Kinase A (PKA) Interaction Disruptors That Activate PKA Interfere with Compartmentalized cAMP Signaling in Cardiac Myocytes. Journal of Biological Chemistry, 2011, 286, 9079-9096.	3.4	92
61	Treatment of intact hepatocytes with either the phorbol ester TPA or glucagon elicits the phosphorylation and functional inactivation of the inhibitory guanine nucleotide regulatory protein Gi. FEBS Letters, 1989, 243, 77-82.	2.8	91
62	Cyclic AMP-dependent Transcriptional Up-regulation of Phosphodiesterase 4D5 in Human Airway Smooth Muscle Cells. Journal of Biological Chemistry, 2002, 277, 35980-35989.	3.4	91
63	Phosphorylation of RACK1 on Tyrosine 52 by c-Abl Is Required for Insulin-like Growth Factor I-mediated Regulation of Focal Adhesion Kinase. Journal of Biological Chemistry, 2009, 284, 20263-20274.	3.4	89
64	Rapid regulation of PDE-2 and PDE-4 cyclic AMP phosphodiesterase activity following ligation of the T cell antigen receptor on thymocytes: Analysis using the selective inhibitors erythro-9-(2-hydroxy-3-nonyl)-adenine (EHNA) and rolipram. Cellular Signalling, 1996, 8, 97-110.	3.6	88
65	Mapping binding sites for the PDE4D5 cAMP-specific phosphodiesterase to the N- and C-domains of Î²-arrestin using spot-immobilized peptide arrays. Biochemical Journal, 2007, 404, 71-80.	3.7	88
66	Disrupted in schizophrenia 1 and phosphodiesterase 4B: towards an understanding of psychiatric illness. Journal of Physiology, 2007, 584, 401-405.	2.9	88
67	Adaptation in cyclic AMP signalling processes: A central role for cyclic AMP phosphodiesterases. Seminars in Cell and Developmental Biology, 1998, 9, 161-167.	5.0	82
68	Remodelling of the PDE4 cAMP phosphodiesterase isoform profile upon monocyteâ€macrophage differentiation of human U937 cells. British Journal of Pharmacology, 2004, 142, 339-351.	5.4	81
69	Cyclic AMP Phosphodiesterase 4D (PDE4D) Tethers EPAC1 in a Vascular Endothelial Cadherin (VE-Cad)-based Signaling Complex and Controls cAMP-mediated Vascular Permeability. Journal of Biological Chemistry, 2010, 285, 33614-33622.	3.4	81
70	Alternative Splicing of cAMP-specific Phosphodiesterase mRNA Transcripts. Journal of Biological Chemistry, 1996, 271, 1065-1071.	3.4	80
71	The role of ventral striatal cAMP signaling in stress-induced behaviors. Nature Neuroscience, 2015, 18, 1094-1100.	14.8	80
72	Phosphodiesterase 11A in brain is enriched in ventral hippocampus and deletion causes psychiatric disease-related phenotypes. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8457-8462.	7.1	78

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73	A high-fat diet promotes depression-like behavior in mice by suppressing hypothalamic PKA signaling. Translational Psychiatry, 2019, 9, 141.	4.8	77
74	Phorbol 12-myristate 13-acetate Triggers the Protein Kinase A-Mediated Phosphorylation and Activation of the PDE4D5 cAMP Phosphodiesterase in Human Aortic Smooth Muscle Cells through a Route Involving Extracellular Signal Regulated Kinase (ERK). Molecular Pharmacology, 2001, 60, 1100-1111.	2.3	71
75	Molecular Cloning, Genomic Positioning, Promoter Identification, and Characterization of the Novel Cyclic AMP-Specific Phosphodiesterase PDE4A10. Molecular Pharmacology, 2001, 59, 996-1011.	2.3	70
76	Chemoresistant KM12C Colon Cancer Cells Are Addicted to Low Cyclic AMP Levels in a Phosphodiesterase 4â€“Regulated Compartment via Effects on Phosphoinositide 3-Kinase. Cancer Research, 2007, 67, 5248-5257.	0.9	68
77	Tyrosine 302 in RACK1 Is Essential for Insulin-like Growth Factor-I-mediated Competitive Binding of PP2A and Î²1 Integrin and for Tumor Cell Proliferation and Migration. Journal of Biological Chemistry, 2008, 283, 22952-22961.	3.4	67
78	PDE4B5, a Novel, Super-Short, Brain-Specific cAMP Phosphodiesterase-4 Variant Whose Isoform-Specifying N-Terminal Region Is Identical to That of cAMP Phosphodiesterase-4D6 (PDE4D6). Journal of Pharmacology and Experimental Therapeutics, 2007, 322, 600-609.	2.5	65
79	MEK1 Binds Directly to Î²Arrestin1, Influencing Both Its Phosphorylation by ERK and the Timing of Its Isoprenaline-stimulated Internalization. Journal of Biological Chemistry, 2009, 284, 11425-11435.	3.4	65
80	Cyclic AMP Controls mTOR through Regulation of the Dynamic Interaction between Rheb and Phosphodiesterase 4D. Molecular and Cellular Biology, 2010, 30, 5406-5420.	2.3	65
81	Identification of a surface on the Î²-propeller protein RACK1 that interacts with the cAMP-specific phosphodiesterase PDE4D5. Cellular Signalling, 2001, 13, 507-513.	3.6	63
82	Phosphorylation of cAMP-specific PDE4A5 (phosphodiesterase-4A5) by MK2 (MAPKAPK2) attenuates its activation through protein kinase A phosphorylation. Biochemical Journal, 2011, 435, 755-769.	3.7	63
83	Constitutive Activation of GÎ±s within Forebrain Neurons Causes Deficits in Sensorimotor Gating Because of PKA-Dependent Decreases in cAMP. Neuropsychopharmacology, 2007, 32, 577-588.	5.4	62
84	The unique N-terminal domain of the cAMP phosphodiesterase PDE4D4 allows for interaction with specific SH3 domains. FEBS Letters, 1999, 460, 173-177.	2.8	61
85	Cross Talk between Phosphatidylinositol 3-Kinase and Cyclic AMP (cAMP)-Protein Kinase A Signaling Pathways at the Level of a Protein Kinase B/Î²-Arrestin/cAMP Phosphodiesterase 4 Complex. Molecular and Cellular Biology, 2010, 30, 1660-1672.	2.3	61
86	Mdm2 Directs the Ubiquitination of Î²-Arrestin-sequestered cAMP Phosphodiesterase-4D5. Journal of Biological Chemistry, 2009, 284, 16170-16182.	3.4	59
87	Oxygen-Dependent Cleavage of the p75 Neurotrophin Receptor Triggers Stabilization of HIF-1Î±. Molecular Cell, 2011, 44, 476-490.	9.7	58
88	Guanosine 5â€²-triphosphate and guanosine 5â€²-[Î²Î³-imido]triphosphate effect a collision coupling mechanism between the glucagon receptor and catalytic unit of adenylate cyclase. Biochemical Journal, 1980, 186, 649-658.	3.7	56
89	Noradrenergic Activity Differentially Regulates the Expression of Rolipramâ€Sensitive, Highâ€Affinity Cyclic AMP Phosphodiesterase (PDE4) in Rat Brain. Journal of Neurochemistry, 1997, 69, 2397-2404.	3.9	56
90	Heterozygous mutations in cyclic AMP phosphodiesterase-4D (PDE4D) and protein kinase A (PKA) provide new insights into the molecular pathology of acrodysostosis. Cellular Signalling, 2014, 26, 2446-2459.	3.6	56

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91	Small-molecule allosteric activators of PDE4 long form cyclic AMP phosphodiesterases. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13320-13329.	7.1	54
92	Cyclic nucleotide phosphodiesterases in Drosophila melanogaster. Biochemical Journal, 2005, 388, 333-342.	3.7	53
93	Identification and Characterization of PDE4A11, a Novel, Widely Expressed Long Isoform Encoded by the Human <i>PDE4A</i> cAMP Phosphodiesterase Gene. Molecular Pharmacology, 2005, 67, 1920-1934.	2.3	53
94	1H NMR structural and functional characterisation of a cAMP-specific phosphodiesterase-4D5 (PDE4D5) N-terminal region peptide that disrupts PDE4D5 interaction with the signalling scaffold proteins, Î²arrestin and RACK1. Cellular Signalling, 2007, 19, 2612-2624.	3.6	53
95	Determination of the Structure of the N-terminal Splice Region of the Cyclic AMP-specific Phosphodiesterase RD1 (RNPDE4A1) by 1H NMR and Identification of the Membrane Association Domain Using Chimeric Constructs. Journal of Biological Chemistry, 1996, 271, 16703-16711.	3.4	52
96	Molecular cloning and subcellular distribution of the novel PDE4B4 cAMP-specific phosphodiesterase isoform. Biochemical Journal, 2003, 370, 429-438.	3.7	52
97	Spatial organisation of AKAP18 and PDE4 isoforms in renal collecting duct principal cells. European Journal of Cell Biology, 2006, 85, 673-678.	3.6	52
98	Putting the lid on phosphodiesterase 4. Nature Biotechnology, 2010, 28, 38-40.	17.5	52
99	Compartmentalized PDE4A5 Signaling Impairs Hippocampal Synaptic Plasticity and Long-Term Memory. Journal of Neuroscience, 2016, 36, 8936-8946.	3.6	52
100	Dynamic Regulation, Desensitization, and Cross-talk in Discrete Subcellular Microdomains during Î²2-Adrenoceptor and Prostanoid Receptor cAMP Signaling. Journal of Biological Chemistry, 2007, 282, 34235-34249.	3.4	51
101	Protein kinase C isoforms play differential roles in the regulation of adipocyte differentiation. Biochemical Journal, 1998, 333, 719-727.	3.7	50
102	Phosphodiesterase-8A binds to and regulates Raf-1 kinase. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1533-42.	7.1	49
103	Phosphodiesterase Inhibitors: Factors That Influence Potency, Selectivity, and Action. Handbook of Experimental Pharmacology, 2011, , 47-84.	1.8	48
104	Molecular clonínc and expression, in both COS-1 cells and S. cerevisiae, of a human cytosolic type-IVA cyclic AMP specific phosphodiesterase (hPDE-IVA-h6.1). Cellular Signalling, 1994, 6, 793-812.	3.6	46
105	A Phosphodiesterase 3B-based Signaling Complex Integrates Exchange Protein Activated by cAMP 1 and Phosphatidylinositol 3-Kinase Signals in Human Arterial Endothelial Cells. Journal of Biological Chemistry, 2011, 286, 16285-16296.	3.4	46
106	Identification and characterization of the human homologue of the short PDE4A cAMP-specific phosphodiesterase RD1 (PDE4A1) by analysis of the human HSPDE4A gene locus located at chromosome 19p13.2. Biochemical Journal, 1998, 333, 693-703.	3.7	45
107	The cAMP-specific Phosphodiesterase PDE4A5 Is Cleaved Downstream of Its SH3 Interaction Domain by Caspase-3. Journal of Biological Chemistry, 2000, 275, 28063-28074.	3.4	45
108	The novel long PDE4A10 cyclic AMP phosphodiesterase shows a pattern of expression within brain that is distinct from the long PDE4A5 and short PDE4A1 isoforms. Cellular Signalling, 2001, 13, 911-918.	3.6	44

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109	In addition to the SH3 binding region, multiple regions within the N-terminal noncatalytic portion of the cAMP-specific phosphodiesterase, PDE4A5, contribute to its intracellular targeting. Cellular Signalling, 2002, 14, 453-465.	3.6	44
110	p75 Neurotrophin Receptor Regulates Energy Balance in Obesity. Cell Reports, 2016, 14, 255-268.	6.4	42
111	Cholera toxin mediated activation of adenylate cyclase in intact rat hepatocytes. FEBS Letters, 1979, 104, 359-363.	2.8	41
112	Growth hormone and phorbol esters require specific protein kinase C isoforms to activate mitogen-activated protein kinases in 3T3-F442A cells. Biochemical Journal, 1997, 324, 159-165.	3.7	41
113	PDE4-regulated cAMP degradation controls the assembly of integrin-dependent actin adhesion structures and REF52 cell migration. Journal of Cell Science, 2004, 117, 2377-2388.	2.0	41
114	Ndel1 alters its conformation by sequestering cAMP-specific phosphodiesterase-4D3 (PDE4D3) in a manner that is dynamically regulated through Protein Kinase A (PKA). Cellular Signalling, 2008, 20, 2356-2369.	3.6	41
115	Regulation of adenylate cyclase (EC 4.6.1.1) activity by its lipid environment. Proceedings of the Nutrition Society, 1985, 44, 157-165.	1.0	40
116	Oxidative stress employs phosphatidyl inositol 3-kinase and ERK signalling pathways to activate cAMP phosphodiesterase-4D3 (PDE4D3) through multi-site phosphorylation at Ser239 and Ser579. Cellular Signalling, 2006, 18, 2056-2069.	3.6	40
117	Intracellular Targeting of Phosphodiesteraseâ€4 Underpins Compartmentalized cAMP Signaling. Current Topics in Developmental Biology, 2006, 75, 225-259.	2.2	40
118	Mutations of Î²-arrestin 2 that limit self-association also interfere with interactions with the Î²2-adrenoceptor and the ERK1/2 MAPKs: implications for Î²2-adrenoceptor signalling via the ERK1/2 MAPKs. Biochemical Journal, 2008, 413, 51-60.	3.7	40
119	Diabetes-induced changes in guanine-nucleotide-regulatory-protein mRNA detected using synthetic oligonucleotide probes. FEBS Journal, 1990, 193, 367-374.	0.2	39
120	Insulin stimulates a novel GTPase activity in human platelets. FEBS Letters, 1987, 216, 94-98.	2.8	38
121	Delineation of RAID1, the RACK1 interaction domain located within the unique N-terminal region of the cAMP-specific phosphodiesterase, PDE4D5. BMC Biochemistry, 2002, 3, 24.	4.4	38
122	Occupancy of the catalytic site of the PDE4A4 cyclic AMP phosphodiesterase by rolipram triggers the dynamic redistribution of this specific isoform in living cells through a cyclic AMP independent process. Cellular Signalling, 2003, 15, 955-971.	3.6	37
123	Hypoxia-induced remodelling of PDE4 isoform expression and cAMP handling in human pulmonary artery smooth muscle cells. European Journal of Cell Biology, 2006, 85, 679-691.	3.6	37
124	Helix-1 of the cAMP-specific phosphodiesterase PDE4A1 regulates its phospholipase-D-dependent redistribution in response to release of Ca2+. Journal of Cell Science, 2006, 119, 3799-3810.	2.0	37
125	p62 (SQSTM1) and cyclic AMP phosphodiesterase-4A4 (PDE4A4) locate to a novel, reversible protein aggregate with links to autophagy and proteasome degradation pathways. Cellular Signalling, 2010, 22, 1576-1596.	3.6	37
126	PKA phosphorylation of p62/SQSTM1 regulates PB1 domain interaction partner binding. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 2765-2774.	4.1	37

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127	Intracellular localization of the PDE4A cAMP-specific phosphodiesterase splice variant RD1 (RNPDE4A1A) in stably transfected human thyroid carcinoma FTC cell lines. Biochemical Journal, 1997, 321, 177-185.	3.7	36
128	Aggregation of scaffolding protein DISC1 dysregulates phosphodiesterase 4 in Huntingtonâ€™s disease. Journal of Clinical Investigation, 2017, 127, 1438-1450.	8.2	36
129	Changes in the phosphorylation state of the inhibitory guanine-nucleotide-binding protein Gi-2 in hepatocytes from lean (Fa/Fa) and obese (fa/fa) Zucker rats. FEBS Journal, 1990, 192, 537-542.	0.2	35
130	Phosphodiesterase-4 influences the PKA phosphorylation status and membrane translocation of G-protein receptor kinase 2 (GRK2) in HEK-293Î²2 cells and cardiac myocytes. Biochemical Journal, 2006, 394, 427-435.	3.7	35
131	Constitutive activation of the G-protein subunit GÎ±s within forebrain neurons causes PKA-dependent alterations in fear conditioning and cortical<i>Arc</i>mRNA expression. Learning and Memory, 2008, 15, 75-83.	1.3	35
132	Selective SUMO modification of cAMP-specific phosphodiesterase-4D5 (PDE4D5) regulates the functional consequences of phosphorylation by PKA and ERK. Biochemical Journal, 2010, 428, 55-65.	3.7	35
133	High-content screening of feeder-free human embryonic stem cells to identify pro-survival small molecules. Biochemical Journal, 2010, 432, 21-35.	3.7	35
134	Interaction between LIS1 and PDE4, and its role in cytoplasmic dynein function. Journal of Cell Science, 2011, 124, 2253-2266.	2.0	35
135	Elucidation of a Structural Basis for the Inhibitor-Driven, p62 (SQSTM1)-Dependent Intracellular Redistribution of cAMP Phosphodiesterase-4A4 (PDE4A4). Journal of Medicinal Chemistry, 2011, 54, 3331-3347.	6.4	34
136	Dimerization of cAMP phosphodiesterase-4 (PDE4) in living cells requires interfaces located in both the UCR1 and catalytic unit domains. Cellular Signalling, 2015, 27, 756-769.	3.6	34
137	The phorbol ester TPA inhibits cyclic AMP phosphodiesterase activity in intact hepatocytes. FEBS Letters, 1986, 208, 455-459.	2.8	33
138	Eukaryotic Translation Initiation Factor 3, Subunit a, Regulates the Extracellular Signal-Regulated Kinase Pathway. Molecular and Cellular Biology, 2012, 32, 88-95.	2.3	33
139	Mitotic activation of the DISC1-inducible cyclic AMP phosphodiesterase-4D9 (PDE4D9), through multi-site phosphorylation, influences cell cycle progression. Cellular Signalling, 2014, 26, 1958-1974.	3.6	33
140	Lentivirus-mediated Reprogramming of Somatic Cells in the Absence of Transgenic Transcription Factors. Molecular Therapy, 2010, 18, 2139-2145.	8.2	32
141	Nuclear pore complex remodeling by p75NTR cleavage controls TGF-Î² signaling and astrocyte functions. Nature Neuroscience, 2015, 18, 1077-1080.	14.8	32
142	Gâ€protein linked receptors: a family probed by molecular cloning and mutagenesis procedures. Clinical Endocrinology, 1992, 36, 525-534.	2.4	30
143	The selective effects of charged local anaesthetics on the glucagon- and fluoride-stimulated adenylate cyclase activity of rat-liver plasma membranes. Journal of Supramolecular Structure, 1980, 14, 21-32.	2.3	27
144	Identification of a multifunctional docking site on the catalytic unit of phosphodiesterase-4 (PDE4) that is utilised by multiple interaction partners. Biochemical Journal, 2017, 474, 597-609.	3.7	27

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145	Insulin controls the cyclic AMP-dependent phosphorylation of integral and peripheral proteins associated with the rat liver plasma membrane. FEBS Letters, 1980, 118, 18-24.	2.8	26
146	The Long and Short of Vascular Smooth Muscle Phosphodiesterase-4 As a Putative Therapeutic Target: Fig. 1.. Molecular Pharmacology, 2005, 68, 563-567.	2.3	26
147	Human PDE4A8, a novel brain-expressed PDE4 cAMP-specific phosphodiesterase that has undergone rapid evolutionary change. Biochemical Journal, 2008, 411, 361-369.	3.7	26
148	Evolutionarily Conserved Role of Calcineurin in Phosphodegron-Dependent Degradation of Phosphodiesterase 4D. Molecular and Cellular Biology, 2010, 30, 4379-4390.	2.3	26
149	The dg2 (for) gene confers a renal phenotype in Drosophila by modulation of cGMP-specific phosphodiesterase. Journal of Experimental Biology, 2004, 207, 2769-2776.	1.7	24
150	Expression, intracellular distribution and basis for lack of catalytic activity of the PDE4A7 isoform encoded by the human PDE4A cAMP-specific phosphodiesterase gene. Biochemical Journal, 2004, 380, 371-384.	3.7	24
151	Surgically Induced Cryptorchidism-Related Degenerative Changes in Spermatogonia Are Associated with Loss of Cyclic Adenosine Monophosphate-Dependent Phosphodiesterases Type 4 in Abdominal Testes of Rats. Biology of Reproduction, 2001, 64, 1583-1589.	2.7	23
152	A scanning peptide array approach uncovers association sites within the JNK/Î²arrestin signalling complex. FEBS Letters, 2009, 583, 3310-3316.	2.8	23
153	Coupling of the Glucagon Receptor to Adenylate Cyclase. Biochemical Society Transactions, 1979, 7, 843-846.	3.4	22
154	Desensitization of atriopeptin stimulated accumulation and extrusion of cyclic GMP from a kidney epithelial cell line (MDCK). Biochemical Pharmacology, 1991, 41, 385-394.	4.4	22
155	The activity of dopamine-stimulated adenylate cyclase from rat brain striatum is modulated by temperature and the bilayer-fluidizing agent, benzyl alcohol. Biochemical Journal, 1982, 206, 89-95.	3.7	21
156	DISC1 regulates N-methyl-D-aspartate receptor dynamics: abnormalities induced by a Disc1 mutation modelling a translocation linked to major mental illness. Translational Psychiatry, 2018, 8, 184.	4.8	21
157	Human PDE4D isoform composition is deregulated in primary prostate cancer and indicative for disease progression and development of distant metastases. Oncotarget, 2016, 7, 70669-70684.	1.8	21
158	Genomic Organisation of the Human Cyclic AMP-Specific Phosphodiesterase PDE4C Gene and Its Chromosomal Localisation to 19p13.1, Between RAB3A and JUNDÂ¶Â¶The sequences described herein have been deposited in GenBank with Accession numbers AF 157805â€"AF 157816.. Cellular Signalling, 1999, 11, 735-742.	3.6	20
159	Reduced PDE4 expression and activity contributes to enhanced catecholamine-induced cAMP accumulation in adipocytes from FOXC2 transgenic mice. FEBS Letters, 2006, 580, 4126-4130.	2.8	20
160	Receptor-mediated stimulation of lipid signalling pathways in CHO cells elicits the rapid transient induction of the PDE1B isoform of Ca2+/calmodulin-stimulated cAMP phosphodiesterase. Biochemical Journal, 1997, 321, 157-163.	3.7	19
161	A RSK(y) Relationship with Promiscuous PKA. Science Signaling, 2006, 2006, pe32-pe32.	3.6	19
162	Amphoptericin B has very different effects on the glucagon- and fluoride-stimulated adenylate cyclase activities of rat liver plasma membranes. FEBS Letters, 1979, 106, 21-24.	2.8	18

#	Article	IF	Citations
163	The local anaesthetic and bilayer fluidising agent, benzyl alcohol decreases the thermostability of the integral membrane protein adenylate cyclase. FEBS Letters, 1982, 140, 85-88.	2.8	18
164	Co-transfection with protein kinase D confers phorbol-ester-mediated inhibition on glucagon-stimulated cAMP accumulation in COS cells transfected to overexpress glucagon receptors. Biochemical Journal, 1997, 326, 545-551.	3.7	18
165	Disrupting specific PDZ domainâ€mediated interactions for therapeutic benefit. British Journal of Pharmacology, 2009, 158, 483-485.	5.4	18
166	In cardiac myocytes, cAMP elevation triggers the down-regulation of transcripts and promoter activity for cyclic AMP phosphodiesterase-4A10 (PDE4A10). Cellular Signalling, 2008, 20, 2071-2083.	3.6	17
167	Chemical informatics uncovers a new role for moexipril as a novel inhibitor of cAMP phosphodiesterase-4 (PDE4). Biochemical Pharmacology, 2013, 85, 1297-1305.	4.4	17
168	The thermodependence of the activity of integral enzymes in liver plasma membranes. FEBS Letters, 1982, 143, 147-152.	2.8	16
169	Adenylate cyclase and a fatty acid spin probe detect changes in plasma membrane lipid phase separations induced by dietary manipulation of the cholesterol:phospholipid ratio. FEBS Letters, 1985, 183, 81-86.	2.8	15
170	Guanine nucleotide regulatory proteins in insulin's action and in diabetes. Biochemical Society Transactions, 1989, 17, 627-629.	3.4	15
171	Hard Times for Oncogenic BRAF-Expressing Melanoma Cells. Cancer Cell, 2011, 19, 3-4.	16.8	15
172	Identification and characterization of small-molecule ligands that maintain pluripotency of human embryonic stem cells. Biochemical Society Transactions, 2010, 38, 1058-1061.	3.4	14
173	Use of an activation-specific probe to show that Rap1A and Rap1B display different sensitivities to activation by forskolin in Rat1 cells. FEBS Letters, 2000, 477, 213-218.	2.8	12
174	Investigation of Extracellular Signal-Regulated Kinase 2 Mitogen-Activated Protein Kinase Phosphorylation and Regulation of Activity of PDE4 Cyclic Adenosine Monophosphate-Specific Phosphodiesterases. , 2005, 307, 225-238.		12
175	A novel role for a Drosophila homologue of cGMP-specific phosphodiesterase in the active transport of cGMP. Biochemical Journal, 2006, 393, 481-488.	3.7	12
176	p62 (SQSTM1) forms part of a novel, reversible aggregate containing a specific conformer of the cAMP degrading phosphodiesterase, PDE4A4. Autophagy, 2010, 6, 1198-1200.	9.1	12
177	Validation of Cyclic Adenosine Monophosphate Phosphodiesterase-4D7 for its Independent Contribution to Risk Stratification in a Prostate Cancer Patient Cohort with Longitudinal Biological Outcomes. European Urology Focus, 2018, 4, 376-384.	3.1	12
178	Regulation of hepatocyte adenylate cyclase by amylin and CGRP: A single receptor displaying apparent negative cooperativity towards CGRP and simple saturation kinetics for amylin, a requirement for phosphodiesterase inhibition to observe elevated hepatocyte cyclic AMP levels and the phosphorylation of Gi-2. Journal of Cellular Biochemistry, 1994, 55, 66-82.	2.6	11
179	The Prognostic PDE4D7 Score in a Diagnostic Biopsy Prostate Cancer Patient Cohort with Longitudinal Biological Outcomes. Prostate Cancer, 2018, 2018, 1-11.	0.6	10
180	Upregulation of cAMP-specific PDE-4 activity following ligation of the TCR complex on thymocytes is blocked by selective inhibitors of protein kinase C and tyrosyl kinases. Cell Biochemistry and Biophysics, 1998, 28, 161-185.	1.8	9

#	Article	IF	Citations
181	Regulation of a <i>Drosophila melanogaster</i> cGMP-specific phosphodiesterase by prenylation and interaction with a prenyl-binding protein. Biochemical Journal, 2008, 414, 363-374.	3.7	9
182	The role of N-<i>ras</i> p21 in the coupling of growth factor receptors to inositol phospholipid turnover. Biochemical Society Transactions, 1987, 15, 45-47.	3.4	8
183	The Association of the Long Prostate Cancer Expressed PDE4D Transcripts to Poor Patient Outcome Depends on the Tumourâ€™s TMPRSS2-ERG Fusion Status. Prostate Cancer, 2019, 2019, 1-14.	0.6	8
184	Creating a potential diagnostic for prostate cancer risk stratification (InformMDxâ„¢) by translating novel scientific discoveries concerning cAMP degrading phosphodiesterase-4D7 (PDE4D7). Clinical Science, 2019, 133, 269-286.	4.3	8
185	The effect of vinblastine on the glucagon, basal and GTP-stimulated states of the adenylate cyclase from rat liver plasma membranes. FEBS Letters, 1980, 111, 290-294.	2.8	7
186	Arrestin Times for Developing Antipsychotics and Î²-Blockers. Science Signaling, 2009, 2, pe22.	3.6	7
187	Treatment of intact hepatocytes with synthetic diacyl glycerols mimics the ability of glucagon to cause the desensitization of adenylate cyclase. FEBS Letters, 1991, 289, 129-132.	2.8	6
188	Discriminative stimulus effects of the type-4 phosphodiesterase inhibitor rolipram in rats. Psychopharmacology, 2001, 158, 297-304.	3.1	6
189	<i>Erythro</i>-9-(2-hydroxy-3-nonyl)adenine (EHNA) blocks differentiation and maintains the expression of pluripotency markers in human embryonic stem cells. Biochemical Journal, 2010, 432, 575-599.	3.7	6
190	Melanoma, Viagra, and PDE5 Inhibitors: Proliferation and Metastasis. Trends in Cancer, 2016, 2, 163-165.	7.4	6
191	Investigation of the alkenyldiarylmethane non-nucleoside reverse transcriptase inhibitors as potential cAMP phosphodiesterase-4B2 inhibitors. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 1530-1533.	2.2	5
192	Localization of the gene for the human serotonin 5-HT_{2B}receptor to chromosome 2. Molecular Membrane Biology, 1996, 13, 29-31.	2.0	4
193	SUMOylation of DISC1: A Potential Role in Neural Progenitor Proliferation in the Developing Cortex. Molecular Neuropsychiatry, 2016, 2, 20-27.	2.9	4
194	Cellular Functions of PDE4 Enzymes. , 2006, , 99-129.		3
195	The insulin-sensitivity of phosphodiesterase activities released by hypotonic extraction of hepatocyte particulate fractions. Biochemical Society Transactions, 1989, 17, 217-217.	3.4	2
196	Regulation of the phosphorylation state of Gi2 in intact rat hepatocytes. Biochemical Society Transactions, 1990, 18, 456-456.	3.4	2
197	G-protein Î±-subunit mRNAs in diabetic rat tissues. Biochemical Society Transactions, 1990, 18, 475-476.	3.4	2
198	Molecular Genetic Approaches III: Determination of Protein Sequence Motifs Involved in Protein Targeting by Use of Coupled Transcriptionâ€“Translation Systems. , 1998, 88, 141-150.		2

#	Article	IF	Citations
199	A High-fat Diet Promotes Depression-like Behavior in Mice by Suppressing Hypothalamic PKA Signaling. SSRN Electronic Journal, 0, , .	0.4	2
200	Activation of the â€˜dense-vesicleâ€•cyclic AMP-phosphodiesterase from rat liver by cyclic AMP-dependent protein kinase. Biochemical Society Transactions, 1988, 16, 1025-1026.	3.4	1
201	Proteolysis of the 52 kDa, insulin-stimulated, peripheral, plasma-membrane cyclic AMP-specific phosphodiesterase. Biochemical Society Transactions, 1989, 17, 666-667.	3.4	1
202	Expression of G-protein Î²-subunit in lean and obese Zucker rats and streptozotocin-induced diabetic and normal rats. Biochemical Society Transactions, 1989, 17, 667-668.	3.4	1
203	Arresting times for PTEN. EMBO Journal, 2011, 30, 2513-2515.	7.8	1
204	Regulation of sensorimotor gating via Disc1/Huntingtin-mediated Bdnf transport in the cortico-striatal circuit. Molecular Psychiatry, 2022, , .	7.9	1
205	Functioning of the inhibitory regulation of adenylate cyclase in diabetic states: a reply. Biochemical Journal, 1991, 278, 310-311.	3.7	0
206	Modulation of adenosine signalling in sheep adipose tissue by growth hormone. Biochemical Society Transactions, 1995, 23, 16S-16S.	3.4	0
207	143 Development of lipid metabolism in ovine preadipocytes in vitro. Biochemical Society Transactions, 1997, 25, S671-S671.	3.4	0
208	136 Antisense technology reveals distinct roles for protein kinase C isoforms during 3T3-F442A preadipocyte differentiation. Biochemical Society Transactions, 1997, 25, S665-S665.	3.4	0
209	PrP. , 2012, , 1488-1488.		0
210	Inhibition of PDE4 (Type 4) Cyclic AMP-specific Phosphodiesterase Isoforms. Expert Opinion on Therapeutic Targets, 1997, 1, 1-4.	1.0	0
211	PDE4. , 2016, , 1-7.		0
212	PDE4. , 2018, , 3834-3840.		0