Dietbert Neumann

List of Publications by Year in descending order

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85 papers

6,711 citations

36 h-index 80 g-index

88 all docs 88 docs citations

88 times ranked 8488 citing authors

#	Article	IF	CITATIONS
1	LKB1 Is the Upstream Kinase in the AMP-Activated Protein Kinase Cascade. Current Biology, 2003, 13, 2004-2008.	1.8	1,456
2	Activation of the AMP-activated Protein Kinase by the Anti-diabetic Drug Metformin in Vivo. Journal of Biological Chemistry, 2004, 279, 43940-43951.	1.6	423
3	Dissecting the Role of 5′-AMP for Allosteric Stimulation, Activation, and Deactivation of AMP-activated Protein Kinase. Journal of Biological Chemistry, 2006, 281, 32207-32216.	1.6	393
4	Insulin Antagonizes Ischemia-induced Thr172 Phosphorylation of AMP-activated Protein Kinase α-Subunits in Heart via Hierarchical Phosphorylation of Ser485/491. Journal of Biological Chemistry, 2006, 281, 5335-5340.	1.6	308
5	Phosphorylation of LKB1 at Serine 428 by Protein Kinase C- $\hat{I}_{f q}$ Is Required for Metformin-Enhanced Activation of the AMP-Activated Protein Kinase in Endothelial Cells. Circulation, 2008, 117, 952-962.	1.6	247
6	AMPK-Mediated AS160 Phosphorylation in Skeletal Muscle Is Dependent on AMPK Catalytic and Regulatory Subunits. Diabetes, 2006, 55, 2051-2058.	0.3	239
7	PKA phosphorylates and inactivates AMPKÎ \pm to promote efficient lipolysis. EMBO Journal, 2010, 29, 469-481.	3.5	235
8	Identification of Phosphorylation Sites in AMP-activated Protein Kinase (AMPK) for Upstream AMPK Kinases and Study of Their Roles by Site-directed Mutagenesis. Journal of Biological Chemistry, 2003, 278, 28434-28442.	1.6	204
9	Dietary Phytoestrogens Activate AMP-Activated Protein Kinase With Improvement in Lipid and Glucose Metabolism. Diabetes, 2008, 57, 1176-1185.	0.3	177
10	Activation of Protein Kinase Cζ by Peroxynitrite Regulates LKB1-dependent AMP-activated Protein Kinase in Cultured Endothelial Cells. Journal of Biological Chemistry, 2006, 281, 6366-6375.	1.6	161
11	Cross-talk between Two Essential Nutrient-sensitive Enzymes. Journal of Biological Chemistry, 2014, 289, 10592-10606.	1.6	154
12	AMP-activated Kinase Inhibits the Epithelial Na+ Channel through Functional Regulation of the Ubiquitin Ligase Nedd4-2. Journal of Biological Chemistry, 2006, 281, 26159-26169.	1.6	139
13	Epithelial Sodium Channel Inhibition by AMP-activated Protein Kinase in Oocytes and Polarized Renal Epithelial Cells. Journal of Biological Chemistry, 2005, 280, 17608-17616.	1.6	136
14	Mammalian AMP-activated protein kinase: functional, heterotrimeric complexes by co-expression of subunits in Escherichia coli. Protein Expression and Purification, 2003, 30, 230-237.	0.6	126
15	AMP-activated protein kinase undergoes nucleotide-dependent conformational changes. Nature Structural and Molecular Biology, 2012, 19, 716-718.	3.6	112
16	AMP-activated Protein Kinase Phosphorylates and Desensitizes Smooth Muscle Myosin Light Chain Kinase. Journal of Biological Chemistry, 2008, 283, 18505-18512.	1.6	99
17	Dual Mechanisms Regulating AMPK Kinase Action in the Ischemic Heart. Circulation Research, 2005, 96, 337-345.	2.0	95
18	PKA Regulates Vacuolar H+-ATPase Localization and Activity via Direct Phosphorylation of the A Subunit in Kidney Cells. Journal of Biological Chemistry, 2010, 285, 24676-24685.	1.6	90

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19	Identification of the Serine 307 of LKB1 as a Novel Phosphorylation Site Essential for Its Nucleocytoplasmic Transport and Endothelial Cell Angiogenesis. Molecular and Cellular Biology, 2009, 29, 3582-3596.	1.1	84
20	Vacuolar H ⁺ -ATPase apical accumulation in kidney intercalated cells is regulated by PKA and AMP-activated protein kinase. American Journal of Physiology - Renal Physiology, 2010, 298, F1162-F1169.	1,3	84
21	Conserved regulatory elements in AMPK. Nature, 2013, 498, E8-E10.	13.7	84
22	Structural Properties of AMP-activated Protein Kinase. Journal of Biological Chemistry, 2008, 283, 18331-18343.	1.6	82
23	AMP-activated protein kinase inhibits alkaline pH- and PKA-induced apical vacuolar H+-ATPase accumulation in epididymal clear cells. American Journal of Physiology - Cell Physiology, 2009, 296, C672-C681.	2.1	73
24	Autoactivation of Transforming Growth Factor \hat{I}^2 -activated Kinase 1 Is a Sequential Bimolecular Process. Journal of Biological Chemistry, 2010, 285, 25753-25766.	1.6	72
25	The endocannabinoid system: Overview of an emerging multi-faceted therapeutic target. Prostaglandins Leukotrienes and Essential Fatty Acids, 2019, 140, 51-56.	1.0	70
26	A molecular approach to the concerted action of kinases involved in energy homoeostasis. Biochemical Society Transactions, 2003, 31, 169-174.	1.6	69
27	The PP1-R6 protein phosphatase holoenzyme is involved in the glucose-induced dephosphorylation and inactivation of AMP-activated protein kinase, a key regulator of insulin secretion, in MIN6 \hat{l}^2 cells. FASEB Journal, 2010, 24, 5080-5091.	0.2	66
28	C-terminal Lysines Determine Phospholipid Interaction of Sarcomeric Mitochondrial Creatine Kinase. Journal of Biological Chemistry, 2004, 279, 24334-24342.	1.6	63
29	Post-translational modifications of CD36 (SR-B2): Implications for regulation of myocellular fatty acid uptake. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 2253-2258.	1.8	61
30	Is TAK1 a Direct Upstream Kinase of AMPK?. International Journal of Molecular Sciences, 2018, 19, 2412.	1.8	61
31	Phosphocreatine Interacts with Phospholipids, Affects Membrane Properties and Exerts Membrane-Protective Effects. PLoS ONE, 2012, 7, e43178.	1.1	61
32	Regulation of the creatine transporter by AMP-activated protein kinase in kidney epithelial cells. American Journal of Physiology - Renal Physiology, 2010, 299, F167-F177.	1.3	57
33	AMPK Î ² subunits display isoform specific affinities for carbohydrates. FEBS Letters, 2010, 584, 3499-3503.	1.3	55
34	AMP-activated protein kinase regulates the vacuolar H ⁺ -ATPase via direct phosphorylation of the A subunit (ATP6V1A) in the kidney. American Journal of Physiology - Renal Physiology, 2013, 305, F943-F956.	1.3	50
35	Palmitate-Induced Vacuolar-Type H+-ATPase Inhibition Feeds Forward Into Insulin Resistance and Contractile Dysfunction. Diabetes, 2017, 66, 1521-1534.	0.3	50
36	The Recruitment of AMP-activated Protein Kinase to Glycogen Is Regulated by Autophosphorylation. Journal of Biological Chemistry, 2015, 290, 11715-11728.	1.6	37

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37	Protein kinase-D1 overexpression prevents lipid-induced cardiac insulin resistance. Journal of Molecular and Cellular Cardiology, 2014, 76, 208-217.	0.9	32
38	New Candidate Targets of AMP-Activated Protein Kinase in Murine Brain Revealed by a Novel Multidimensional Substrate-Screen for Protein Kinases. Journal of Proteome Research, 2007, 6, 3266-3277.	1.8	31
39	AMPK activation by long chain fatty acyl analogs. Biochemical Pharmacology, 2008, 76, 1263-1275.	2.0	31
40	2-Arachidonoylglycerol ameliorates inflammatory stress-induced insulin resistance in cardiomyocytes. Journal of Biological Chemistry, 2017, 292, 7105-7114.	1.6	30
41	Myosin light chains are not a physiological substrate of AMPK in the control of cell structure changes. FEBS Letters, 2009, 583, 25-28.	1.3	27
42	Cardiac contraction-induced GLUT4 translocation requires dual signaling input. Trends in Endocrinology and Metabolism, 2015, 26, 404-410.	3.1	27
43	Co-expression of LKB1, MO25α and STRADα in bacteria yield the functional and active heterotrimeric complex. Molecular Biotechnology, 2007, 36, 220-231.	1.3	25
44	Homo-oligomerization and Activation of AMP-activated Protein Kinase Are Mediated by the Kinase Domain αG-Helix. Journal of Biological Chemistry, 2009, 284, 27425-27437.	1.6	25
45	Role of Binding and Nucleoside Diphosphate Kinase A in the Regulation of the Cystic Fibrosis Transmembrane Conductance Regulator by AMP-activated Protein Kinase. Journal of Biological Chemistry, 2012, 287, 33389-33400.	1.6	25
46	AMPK-dependent activation of the Cyclin Y/CDK16 complex controls autophagy. Nature Communications, 2020, 11, 1032.	5.8	25
47	Understanding the distinct subcellular trafficking of CD36 and GLUT4 during the development of myocardial insulin resistance. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165775.	1.8	24
48	Molecular mechanism of lipid-induced cardiac insulin resistance and contractile dysfunction. Prostaglandins Leukotrienes and Essential Fatty Acids, 2018, 136, 131-141.	1.0	23
49	Pharmacological Targeting of AMP-Activated Protein Kinase and Opportunities for Computer-Aided Drug Design. Journal of Medicinal Chemistry, 2016, 59, 2879-2893.	2.9	21
50	MSP: An emerging player in metabolic syndrome. Cytokine and Growth Factor Reviews, 2015, 26, 75-82.	3.2	19
51	Activation of the metabolic sensor AMP-activated protein kinase inhibits aquaporin-2 function in kidney principal cells. American Journal of Physiology - Renal Physiology, 2016, 311, F890-F900.	1.3	19
52	Augmenting Vacuolar H+-ATPase Function Prevents Cardiomyocytes from Lipid-Overload Induced Dysfunction. International Journal of Molecular Sciences, 2020, 21, 1520.	1.8	19
53	AMP-Activated Protein Kinase β-Subunit Requires Internal Motion forÂOptimal Carbohydrate Binding. Biophysical Journal, 2012, 102, 305-314.	0.2	18
54	Tracking and quantification of 32P-labeled phosphopeptides in liquid chromatography matrix-assisted laser desorption/ionization mass spectrometry. Analytical Biochemistry, 2009, 390, 141-148.	1.1	17

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55	Calcium signaling recruits substrate transporters GLUT4 and CD36 to the sarcolemma without increasing cardiac substrate uptake. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E225-E236.	1.8	17
56	MSP is a negative regulator of inflammation and lipogenesis in ex vivo models of non-alcoholic steatohepatitis. Experimental and Molecular Medicine, 2016, 48, e258-e258.	3.2	17
57	\hat{l}^21 Pix exchange factor stabilizes the ubiquitin ligase Nedd4-2 and plays a critical role in ENaC regulation by AMPK in kidney epithelial cells. Journal of Biological Chemistry, 2018, 293, 11612-11624.	1.6	17
58	The PP1â€R6 protein phosphatase holoenzyme is involved in the glucoseâ€induced dephosphorylation and inactivation of AMPâ€activated protein kinase, a key regulator of insulin secretion, in MIN6 β cells. FASEB Journal, 2010, 24, 5080-5091.	0.2	17
59	Regulation of brain-type creatine kinase by AMP-activated protein kinase: Interaction, phosphorylation and ER localization. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1271-1283.	0.5	16
60	Specific amino acid supplementation rescues the heart from lipid overload-induced insulin resistance and contractile dysfunction by targeting the endosomal mTOR–v-ATPase axis. Molecular Metabolism, 2021, 53, 101293.	3.0	16
61	Human embryonic stem cell-derived cardiomyocytes as an in vitro model to study cardiac insulin resistance. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 1960-1967.	1.8	14
62	Hypoxia impairs adaptation of skeletal muscle protein turnover- and AMPK signaling during fasting-induced muscle atrophy. PLoS ONE, 2018, 13, e0203630.	1.1	14
63	Macrophage Stimulating Protein Enhances Hepatic Inflammation in a NASH Model. PLoS ONE, 2016, 11, e0163843.	1.1	13
64	AICAR Protects against High Palmitate/High Insulin-Induced Intramyocellular Lipid Accumulation and Insulin Resistance in HL-1 Cardiac Cells by Inducing PPAR-Target Gene Expression. PPAR Research, 2015, 2015, 1-12.	1.1	12
65	Novel candidate substrates of AMP-activated protein kinase identified in red blood cell lysates. Biochemical and Biophysical Research Communications, 2010, 398, 296-301.	1.0	10
66	Glucoseâ€dependent regulation of AMPâ€activated protein kinase in MIN6 beta cells is not affected by the protein kinase A pathway. FEBS Letters, 2012, 586, 4241-4247.	1.3	10
67	Small heterodimer partner (SHP) contributes to insulin resistance in cardiomyocytes. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2017, 1862, 541-551.	1.2	10
68	AMP-activated Protein Kinase Up-regulates Mitogen-activated Protein (MAP) Kinase-interacting Serine/Threonine Kinase 1a-dependent Phosphorylation of Eukaryotic Translation Initiation Factor 4E. Journal of Biological Chemistry, 2016, 291, 17020-17027.	1.6	9
69	Putative Role of Protein Palmitoylation in Cardiac Lipid-Induced Insulin Resistance. International Journal of Molecular Sciences, 2020, 21, 9438.	1.8	9
70	The interaction between AMPK \hat{l}^2 2 and the PP1-targeting subunit R6 is dynamically regulated by intracellular glycogen content. Biochemical Journal, 2016, 473, 937-947.	1.7	8
71	GSK-3 Inhibitors: Anti-Diabetic Treatment Associated with Cardiac Risk?. Cardiovascular Drugs and Therapy, 2016, 30, 233-235.	1.3	8
72	AMP-Activated Protein Kinase Signalling. International Journal of Molecular Sciences, 2019, 20, 766.	1.8	7

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73	Signaling by AMP-activated Protein Kinase. , 0, , 303-338.		6
74	Fluorescent labelling of membrane fatty acid transporter CD36 (SR-B2) in the extracellular loop. PLoS ONE, 2019, 14, e0210704.	1.1	5
75	An automated home-built low-cost fermenter suitable for large-scale bacterial expression of proteins in <i>Escherichia coli</i> in SioTechniques, 2008, 45, 187-189.	0.8	4
76	The CCNY (cyclin Y)-CDK16 kinase complex: a new regulator of autophagy downstream of AMPK. Autophagy, 2020, 16, 1724-1726.	4.3	4
77	Endosomal v-ATPase as a Sensor Determining Myocardial Substrate Preference. Metabolites, 2022, 12, 579.	1.3	3
78	MK3 Modulation Affects BMI1-Dependent and Independent Cell Cycle Check-Points. PLoS ONE, 2015, 10, e0118840.	1.1	2
79	Letter by Neumann et al Regarding Article, "Myostatin Regulates Energy Homeostasis in the Heart and Prevents Heart Failure― Circulation Research, 2015, 116, e95-6.	2.0	1
80	Assessment of AMPK-Stimulated Cellular Long-Chain Fatty Acid and Glucose Uptake. Methods in Molecular Biology, 2018, 1732, 343-361.	0.4	1
81	PS9 - 41. Translocation of substrate transporters glut4 and cd36 to the sarcolemma and subsequent activation to increase substrate uptake are separate events. Nederlands Tijdschrift Voor Diabetologie, 2012, 10, 127-127.	0.0	O
82	PS9 - 42. Contraction-induced increase in muscle glucose uptake requires dual signaling input – Consequence for muscle glucose utilization in diabetes. Nederlands Tijdschrift Voor Diabetologie, 2012, 10, 127-128.	0.0	0
83	PS6 - 2. â€~Tour d'AMPK': Myocellular cycling of the energy sensor AMPK between free and glycogen-bound states. Nederlands Tijdschrift Voor Diabetologie, 2013, 11, 150-150.	0.0	O
84	In Vitro Methods to Study AMPK. Exs, 2016, 107, 471-489.	1.4	0
85	Role of AMPK and PKA in the trafficking of Vâ€ATPase in kidney intercalated cells. FASEB Journal, 2010, 24,	0.2	O