

Benoit Viollet

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

328
papers

36,265
citations

91
h-index

183
g-index

369
ext. papers

40,885
ext. citations

7.9
avg, IF

7.17
L-index

#	Paper	IF	Citations
328	AMPK and mTOR regulate autophagy through direct phosphorylation of Ulk1. <i>Nature Cell Biology</i> , 2011 , 13, 132-41	23.4	4181
327	Phosphorylation of ULK1 (hATG1) by AMP-activated protein kinase connects energy sensing to mitophagy. <i>Science</i> , 2011 , 331, 456-61	33.3	1746
326	Cellular and molecular mechanisms of metformin: an overview. <i>Clinical Science</i> , 2012 , 122, 253-70	6.5	1094
325	Metformin inhibits hepatic gluconeogenesis in mice independently of the LKB1/AMPK pathway via a decrease in hepatic energy state. <i>Journal of Clinical Investigation</i> , 2010 , 120, 2355-69	15.9	848
324	Systemic treatment with the antidiabetic drug metformin selectively impairs p53-deficient tumor cell growth. <i>Cancer Research</i> , 2007 , 67, 6745-52	10.1	746
323	Metformin: from mechanisms of action to therapies. <i>Cell Metabolism</i> , 2014 , 20, 953-66	24.6	715
322	Metformin, independent of AMPK, inhibits mTORC1 in a rag GTPase-dependent manner. <i>Cell Metabolism</i> , 2010 , 11, 390-401	24.6	631
321	AMPK is a negative regulator of the Warburg effect and suppresses tumor growth in vivo. <i>Cell Metabolism</i> , 2013 , 17, 113-24	24.6	593
320	Biguanides suppress hepatic glucagon signalling by decreasing production of cyclic AMP. <i>Nature</i> , 2013 , 494, 256-60	50.4	565
319	AMP-activated protein kinase-deficient mice are resistant to the metabolic effects of resveratrol. <i>Diabetes</i> , 2010 , 59, 554-63	0.9	540
318	Knockout of the alpha2 but not alpha1 5'-AMP-activated protein kinase isoform abolishes 5-aminoimidazole-4-carboxamide-1-beta-4-ribofuranosidebut not contraction-induced glucose uptake in skeletal muscle. <i>Journal of Biological Chemistry</i> , 2004 , 279, 1070-9	5.4	436
317	Anti-obesity effects of alpha-lipoic acid mediated by suppression of hypothalamic AMP-activated protein kinase. <i>Nature Medicine</i> , 2004 , 10, 727-33	50.5	424
316	The AMP-activated protein kinase alpha2 catalytic subunit controls whole-body insulin sensitivity. <i>Journal of Clinical Investigation</i> , 2003 , 111, 91-8	15.9	396
315	Activation of AMP-activated protein kinase in the liver: a new strategy for the management of metabolic hepatic disorders. <i>Journal of Physiology</i> , 2006 , 574, 41-53	3.9	394
314	AMPK is essential for energy homeostasis regulation and glucose sensing by POMC and AgRP neurons. <i>Journal of Clinical Investigation</i> , 2007 , 117, 2325-36	15.9	377
313	The energy sensor AMPK regulates T cell metabolic adaptation and effector responses in vivo. <i>Immunity</i> , 2015 , 42, 41-54	32.3	372
312	5'-AMP-activated protein kinase (AMPK) is induced by low-oxygen and glucose deprivation conditions found in solid-tumor microenvironments. <i>Molecular and Cellular Biology</i> , 2006 , 26, 5336-47	4.8	365

311	Activation of the AMP-activated kinase by antidiabetes drug metformin stimulates nitric oxide synthesis in vivo by promoting the association of heat shock protein 90 and endothelial nitric oxide synthase. <i>Diabetes</i> , 2006 , 55, 496-505	0.9	360
310	Bcl-2 protects from lethal hepatic apoptosis induced by an anti-Fas antibody in mice. <i>Nature Medicine</i> , 1996 , 2, 80-6	50.5	354
309	AMP-activated protein kinase in the regulation of hepatic energy metabolism: from physiology to therapeutic perspectives. <i>Acta Physiologica</i> , 2009 , 196, 81-98	5.6	334
308	Mechanism of action of A-769662, a valuable tool for activation of AMP-activated protein kinase. <i>Journal of Biological Chemistry</i> , 2007 , 282, 32549-60	5.4	329
307	Anti-Inflammatory Effects of Metformin Irrespective of Diabetes Status. <i>Circulation Research</i> , 2016 , 119, 652-65	15.7	326
306	AMPK dysregulation promotes diabetes-related reduction of superoxide and mitochondrial function. <i>Journal of Clinical Investigation</i> , 2013 , 123, 4888-99	15.9	310
305	Short-term overexpression of a constitutively active form of AMP-activated protein kinase in the liver leads to mild hypoglycemia and fatty liver. <i>Diabetes</i> , 2005 , 54, 1331-9	0.9	301
304	AMPK β regulates macrophage skewing at the time of resolution of inflammation during skeletal muscle regeneration. <i>Cell Metabolism</i> , 2013 , 18, 251-64	24.6	300
303	Signaling kinase AMPK activates stress-promoted transcription via histone H2B phosphorylation. <i>Science</i> , 2010 , 329, 1201-5	33.3	282
302	AMPK inhibition in health and disease. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2010 , 45, 276-95	8.7	281
301	Anti-lipolytic action of AMP-activated protein kinase in rodent adipocytes. <i>Journal of Biological Chemistry</i> , 2005 , 280, 25250-7	5.4	259
300	AMPK α 2 deletion causes aberrant expression and activation of NAD(P)H oxidase and consequent endothelial dysfunction in vivo: role of 26S proteasomes. <i>Circulation Research</i> , 2010 , 106, 1117-28	15.7	254
299	Hypoxic activation of AMPK is dependent on mitochondrial ROS but independent of an increase in AMP/ATP ratio. <i>Free Radical Biology and Medicine</i> , 2009 , 46, 1386-91	7.8	241
298	Intestinal gluconeogenesis is a key factor for early metabolic changes after gastric bypass but not after gastric lap-band in mice. <i>Cell Metabolism</i> , 2008 , 8, 201-11	24.6	240
297	Nicotinamide phosphoribosyltransferase protects against ischemic stroke through SIRT1-dependent adenosine monophosphate-activated kinase pathway. <i>Annals of Neurology</i> , 2011 , 69, 360-74	9.4	236
296	5-aminoimidazole-4-carboxamide-1-beta-4-ribofuranoside inhibits proinflammatory response in glial cells: a possible role of AMP-activated protein kinase. <i>Journal of Neuroscience</i> , 2004 , 24, 479-87	6.6	234
295	A role for AMP-activated protein kinase in diabetes-induced renal hypertrophy. <i>American Journal of Physiology - Renal Physiology</i> , 2007 , 292, F617-27	4.3	231
294	Effects of alpha-AMPK knockout on exercise-induced gene activation in mouse skeletal muscle. <i>FASEB Journal</i> , 2005 , 19, 1146-8	0.9	230

293	Metformin reduces endogenous reactive oxygen species and associated DNA damage. <i>Cancer Prevention Research</i> , 2012 , 5, 536-43	3.2	224
292	Polyunsaturated fatty acids suppress glycolytic and lipogenic genes through the inhibition of ChREBP nuclear protein translocation. <i>Journal of Clinical Investigation</i> , 2005 , 115, 2843-54	15.9	223
291	AMPK: Lessons from transgenic and knockout animals. <i>Frontiers in Bioscience - Landmark</i> , 2009 , 14, 19-44.	4.8	221
290	AMPK-mediated AS160 phosphorylation in skeletal muscle is dependent on AMPK catalytic and regulatory subunits. <i>Diabetes</i> , 2006 , 55, 2051-8	0.9	215
289	Maintenance of metabolic homeostasis by Sestrin2 and Sestrin3. <i>Cell Metabolism</i> , 2012 , 16, 311-21	24.6	200
288	PKA phosphorylates and inactivates AMPK α to promote efficient lipolysis. <i>EMBO Journal</i> , 2010 , 29, 469-81	13	200
287	Targeting the AMPK pathway for the treatment of Type 2 diabetes. <i>Frontiers in Bioscience - Landmark</i> , 2009 , 14, 3380-400	2.8	198
286	The α 2-5'AMP-activated protein kinase is a site 2 glycogen synthase kinase in skeletal muscle and is responsive to glucose loading. <i>Diabetes</i> , 2004 , 53, 3074-81	0.9	197
285	Physiological role of AMP-activated protein kinase (AMPK): insights from knockout mouse models. <i>Biochemical Society Transactions</i> , 2003 , 31, 216-9	5.1	196
284	Resveratrol inhibits cardiac hypertrophy via AMP-activated protein kinase and Akt. <i>Journal of Biological Chemistry</i> , 2008 , 283, 24194-201	5.4	192
283	Liver adenosine monophosphate-activated kinase- α 2 catalytic subunit is a key target for the control of hepatic glucose production by adiponectin and leptin but not insulin. <i>Endocrinology</i> , 2006 , 147, 2432-41	4.8	190
282	Metformin activates AMP-activated protein kinase in primary human hepatocytes by decreasing cellular energy status. <i>Diabetologia</i> , 2011 , 54, 3101-10	10.3	187
281	Understanding the glucoregulatory mechanisms of metformin in type 2 diabetes mellitus. <i>Nature Reviews Endocrinology</i> , 2019 , 15, 569-589	15.2	183
280	Activation of AMP-activated protein kinase α 2 by nicotine instigates formation of abdominal aortic aneurysms in mice in vivo. <i>Nature Medicine</i> , 2012 , 18, 902-10	50.5	181
279	Neuroprotective effects of adenosine monophosphate-activated protein kinase inhibition and gene deletion in stroke. <i>Stroke</i> , 2007 , 38, 2992-9	6.7	181
278	AMPK in skeletal muscle function and metabolism. <i>FASEB Journal</i> , 2018 , 32, 1741-1777	0.9	172
277	Discrete mechanisms of mTOR and cell cycle regulation by AMPK agonists independent of AMPK. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E435-44	11.5	170
276	AMPK α : a glucose sensor that controls CD8 T-cell memory. <i>European Journal of Immunology</i> , 2013 , 43, 889-96	6.1	168

275	Immunochemical characterization and transacting properties of upstream stimulatory factor isoforms. <i>Journal of Biological Chemistry</i> , 1996 , 271, 1405-15	5.4	168
274	Activation of 5'-AMP-activated kinase with diabetes drug metformin induces casein kinase Iepsilon (CKIepsilon)-dependent degradation of clock protein mPer2. <i>Journal of Biological Chemistry</i> , 2007 , 282, 20794-8	5.4	165
273	Protein kinase A-dependent phosphorylation modulates DNA-binding activity of hepatocyte nuclear factor 4. <i>Molecular and Cellular Biology</i> , 1997 , 17, 4208-19	4.8	161
272	5-Aminoimidazole-4-carboxamide-1-beta-D-ribofuranoside and metformin inhibit hepatic glucose phosphorylation by an AMP-activated protein kinase-independent effect on glucokinase translocation. <i>Diabetes</i> , 2006 , 55, 865-74	0.9	159
271	The LKB1/AMPK signaling pathway has tumor suppressor activity in acute myeloid leukemia through the repression of mTOR-dependent oncogenic mRNA translation. <i>Blood</i> , 2010 , 116, 4262-73	2.2	153
270	The glycolytic shift in fumarate-hydratase-deficient kidney cancer lowers AMPK levels, increases anabolic propensities and lowers cellular iron levels. <i>Cancer Cell</i> , 2011 , 20, 315-27	24.3	152
269	AMP activated protein kinase-alpha2 deficiency exacerbates pressure-overload-induced left ventricular hypertrophy and dysfunction in mice. <i>Hypertension</i> , 2008 , 52, 918-24	8.5	150
268	Upregulation of mitochondrial uncoupling protein-2 by the AMP-activated protein kinase in endothelial cells attenuates oxidative stress in diabetes. <i>Diabetes</i> , 2008 , 57, 3222-30	0.9	143
267	AMPK controls exercise endurance, mitochondrial oxidative capacity, and skeletal muscle integrity. <i>FASEB Journal</i> , 2014 , 28, 3211-24	0.9	142
266	Metformin Antagonizes Cancer Cell Proliferation by Suppressing Mitochondrial-Dependent Biosynthesis. <i>PLoS Biology</i> , 2015 , 13, e1002309	9.7	142
265	S6 kinase deletion suppresses muscle growth adaptations to nutrient availability by activating AMP kinase. <i>Cell Metabolism</i> , 2007 , 5, 476-87	24.6	142
264	Role of AMPKalpha2 in basal, training-, and AICAR-induced GLUT4, hexokinase II, and mitochondrial protein expression in mouse muscle. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2007 , 292, E331-9	6	140
263	Activation of Skeletal Muscle AMPK Promotes Glucose Disposal and Glucose Lowering in Non-human Primates and Mice. <i>Cell Metabolism</i> , 2017 , 25, 1147-1159.e10	24.6	139
262	AMPK/βKetoglutarate Axis Dynamically Mediates DNA Demethylation in the Prdm16 Promoter and Brown Adipogenesis. <i>Cell Metabolism</i> , 2016 , 24, 542-554	24.6	135
261	Targeting AMP-activated protein kinase as a novel therapeutic approach for the treatment of metabolic disorders. <i>Diabetes and Metabolism</i> , 2007 , 33, 395-402	5.4	134
260	AMP-activated protein kinase (AMPK) activation regulates in vitro bone formation and bone mass. <i>Bone</i> , 2010 , 47, 309-19	4.7	131
259	Hepatocyte nuclear factor-4alpha involved in type 1 maturity-onset diabetes of the young is a novel target of AMP-activated protein kinase. <i>Diabetes</i> , 2001 , 50, 1515-21	0.9	127
258	AMPK-independent induction of autophagy by cytosolic Ca ²⁺ increase. <i>Cellular Signalling</i> , 2010 , 22, 914-25	12.5	126

257	Adiponectin suppresses gluconeogenic gene expression in mouse hepatocytes independent of LKB1-AMPK signaling. <i>Journal of Clinical Investigation</i> , 2011 , 121, 2518-28	15.9	125
256	In vivo activation of AMP-activated protein kinase attenuates diabetes-enhanced degradation of GTP cyclohydrolase I. <i>Diabetes</i> , 2009 , 58, 1893-901	0.9	121
255	Induced adiposity and adipocyte hypertrophy in mice lacking the AMP-activated protein kinase- α 2 subunit. <i>Diabetes</i> , 2004 , 53, 2242-9	0.9	120
254	Diet and gastrointestinal bypass-induced weight loss: the roles of ghrelin and peptide YY. <i>Diabetes</i> , 2011 , 60, 810-8	0.9	113
253	Inhibition of AMP-activated protein kinase signaling alleviates impairments in hippocampal synaptic plasticity induced by amyloid β . <i>Journal of Neuroscience</i> , 2014 , 34, 12230-8	6.6	111
252	Motif affinity and mass spectrometry proteomic approach for the discovery of cellular AMPK targets: identification of mitochondrial fission factor as a new AMPK substrate. <i>Cellular Signalling</i> , 2015 , 27, 978-88	4.9	109
251	AMPK activation counteracts cardiac hypertrophy by reducing O-GlcNAcylation. <i>Nature Communications</i> , 2018 , 9, 374	17.4	108
250	Activation of AMPK α in adipocytes is essential for nicotine-induced insulin resistance in vivo. <i>Nature Medicine</i> , 2015 , 21, 373-82	50.5	107
249	Transcription factor-dependent regulation of CBP and P/CAF histone acetyltransferase activity. <i>EMBO Journal</i> , 2001 , 20, 1984-92	13	102
248	Differential effects of AMPK agonists on cell growth and metabolism. <i>Oncogene</i> , 2015 , 34, 3627-39	9.2	99
247	The LKB1-salt-inducible kinase pathway functions as a key gluconeogenic suppressor in the liver. <i>Nature Communications</i> , 2014 , 5, 4535	17.4	99
246	Important role for AMPK α 1 in limiting skeletal muscle cell hypertrophy. <i>FASEB Journal</i> , 2009 , 23, 2264-73	0.9	99
245	Autophagy is required for endothelial cell alignment and atheroprotection under physiological blood flow. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E8675-E8684	11.5	98
244	AMP-activated protein kinase inhibits transforming growth factor- β -induced Smad3-dependent transcription and myofibroblast transdifferentiation. <i>Journal of Biological Chemistry</i> , 2008 , 283, 10461-9	5.4	97
243	AMP-activated protein kinase phosphorylates and desensitizes smooth muscle myosin light chain kinase. <i>Journal of Biological Chemistry</i> , 2008 , 283, 18505-12	5.4	95
242	Enhanced Muscle Insulin Sensitivity After Contraction/Exercise Is Mediated by AMPK. <i>Diabetes</i> , 2017 , 66, 598-612	0.9	94
241	Perivascular adipose tissue control of insulin-induced vasoreactivity in muscle is impaired in db/db mice. <i>Diabetes</i> , 2013 , 62, 590-8	0.9	93
240	AMPK activation by oncogenesis is required to maintain cancer cell proliferation in astrocytic tumors. <i>Cancer Research</i> , 2013 , 73, 2628-38	10.1	92

239	AMP-activated protein kinase-independent inhibition of hepatic mitochondrial oxidative phosphorylation by AICA riboside. <i>Biochemical Journal</i> , 2007 , 404, 499-507	3.8	92
238	AMPK regulates circadian rhythms in a tissue- and isoform-specific manner. <i>PLoS ONE</i> , 2011 , 6, e18450	3.7	91
237	Activation of AMP kinase alpha1 subunit induces aortic vasorelaxation in mice. <i>Journal of Physiology</i> , 2007 , 581, 1163-71	3.9	90
236	Obesity Impairs Skeletal Muscle Regeneration Through Inhibition of AMPK. <i>Diabetes</i> , 2016 , 65, 188-200	0.9	87
235	Mechanism of action of compound-13: an α -selective small molecule activator of AMPK. <i>Chemistry and Biology</i> , 2014 , 21, 866-79		87
234	Prior AICAR stimulation increases insulin sensitivity in mouse skeletal muscle in an AMPK-dependent manner. <i>Diabetes</i> , 2015 , 64, 2042-55	0.9	87
233	Cardiotrophin-1 is a key regulator of glucose and lipid metabolism. <i>Cell Metabolism</i> , 2011 , 14, 242-53	24.6	86
232	AMP-activated protein kinase (AMPK) activity is not required for neuronal development but regulates axogenesis during metabolic stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 5849-54	11.5	86
231	Ablation of AMP-activated protein kinase alpha1 and alpha2 from mouse pancreatic beta cells and RIP2.Cre neurons suppresses insulin release in vivo. <i>Diabetologia</i> , 2010 , 53, 924-36	10.3	86
230	AMP-activated protein kinase regulates lymphocyte responses to metabolic stress but is largely dispensable for immune cell development and function. <i>European Journal of Immunology</i> , 2008 , 38, 948-56	6.1	86
229	Expanding roles for AMPK in skeletal muscle plasticity. <i>Trends in Endocrinology and Metabolism</i> , 2015 , 26, 275-86	8.8	84
228	TIM-4 glycoprotein-mediated degradation of dying tumor cells by autophagy leads to reduced antigen presentation and increased immune tolerance. <i>Immunity</i> , 2013 , 39, 1070-81	32.3	83
227	AICAR induces apoptosis independently of AMPK and p53 through up-regulation of the BH3-only proteins BIM and NOXA in chronic lymphocytic leukemia cells. <i>Blood</i> , 2010 , 116, 3023-32	2.2	83
226	AMPK antagonizes hepatic glucagon-stimulated cyclic AMP signalling via phosphorylation-induced activation of cyclic nucleotide phosphodiesterase 4B. <i>Nature Communications</i> , 2016 , 7, 10856	17.4	83
225	AMP-activated protein kinase and metabolic control. <i>Handbook of Experimental Pharmacology</i> , 2011 , 303-30	3.2	81
224	Coordinated maintenance of muscle cell size control by AMP-activated protein kinase. <i>FASEB Journal</i> , 2010 , 24, 3555-61	0.9	81
223	Compound C inhibits hypoxic activation of HIF-1 independent of AMPK. <i>FEBS Letters</i> , 2007 , 581, 5727-31	3.8	81
222	AMPK Re-Activation Suppresses Hepatic Steatosis but its Downregulation Does Not Promote Fatty Liver Development. <i>EBioMedicine</i> , 2018 , 28, 194-209	8.8	79

221	AMPK maintains energy homeostasis and survival in cancer cells via regulating p38/PGC-1 β mediated mitochondrial biogenesis. <i>Cell Death Discovery</i> , 2015 , 1, 15063	6.9	79
220	AMPK α deletion exacerbates neointima formation by upregulating Skp2 in vascular smooth muscle cells. <i>Circulation Research</i> , 2011 , 109, 1230-9	15.7	79
219	Metformin suppresses adipogenesis through both AMP-activated protein kinase (AMPK)-dependent and AMPK-independent mechanisms. <i>Molecular and Cellular Endocrinology</i> , 2017 , 440, 57-68	4.4	78
218	Genetic deletion of catalytic subunits of AMP-activated protein kinase increases osteoclasts and reduces bone mass in young adult mice.. <i>Journal of Biological Chemistry</i> , 2013 , 288, 23432	5.4	78
217	Proteome analysis of erythrocytes lacking AMP-activated protein kinase reveals a role of PAK2 kinase in eryptosis. <i>Journal of Proteome Research</i> , 2011 , 10, 1690-7	5.6	77
216	Crucial role for LKB1 to AMPK α 2 axis in the regulation of CD36-mediated long-chain fatty acid uptake into cardiomyocytes. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2009 , 1791, 212-9	5	77
215	AMP-activated protein kinase pathway and bone metabolism. <i>Journal of Endocrinology</i> , 2012 , 212, 277-90.7	4.7	77
214	Stimulation of AMP-activated protein kinase is essential for the induction of drug metabolizing enzymes by phenobarbital in human and mouse liver. <i>Molecular Pharmacology</i> , 2006 , 70, 1925-34	4.3	77
213	AMPK α deficiency amplifies proinflammatory myeloid APC activity and CD40 signaling. <i>Journal of Leukocyte Biology</i> , 2013 , 94, 1113-21	6.5	76
212	Co-activation of AMPK and mTORC1 Induces Cytotoxicity in Acute Myeloid Leukemia. <i>Cell Reports</i> , 2015 , 11, 1446-57	10.6	76
211	Loss of AMP-activated protein kinase- α impairs the insulin-sensitizing effect of calorie restriction in skeletal muscle. <i>Diabetes</i> , 2012 , 61, 1051-61	0.9	75
210	Autophagy controls p38 activation to promote cell survival under genotoxic stress. <i>Journal of Biological Chemistry</i> , 2013 , 288, 1603-11	5.4	75
209	Beyond AICA riboside: in search of new specific AMP-activated protein kinase activators. <i>IUBMB Life</i> , 2009 , 61, 18-26	4.7	75
208	AMP-activated protein kinase phosphorylates and inactivates liver glycogen synthase. <i>Biochemical Journal</i> , 2012 , 443, 193-203	3.8	75
207	Defining the contribution of AMP-activated protein kinase (AMPK) and protein kinase C (PKC) in regulation of glucose uptake by metformin in skeletal muscle cells. <i>Journal of Biological Chemistry</i> , 2012 , 287, 20088-99	5.4	74
206	Regulation of hepatic metabolism by AMPK. <i>Journal of Hepatology</i> , 2011 , 54, 827-9	13.4	72
205	AMPK α 1 deletion shortens erythrocyte life span in mice: role of oxidative stress. <i>Journal of Biological Chemistry</i> , 2010 , 285, 19976-85	5.4	72
204	Cellular energy depletion resets whole-body energy by promoting coactivator-mediated dietary fuel absorption. <i>Cell Metabolism</i> , 2011 , 13, 35-43	24.6	71

203	AMPK alpha1 activation is required for stimulation of glucose uptake by twitch contraction, but not by H ₂ O ₂ , in mouse skeletal muscle. <i>PLoS ONE</i> , 2008 , 3, e2102	3.7	71
202	Role of the alpha2-isoform of AMP-activated protein kinase in the metabolic response of the heart to no-flow ischemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006 , 291, H2875-83	5.3	71
201	AMP-activated protein kinase induces p53 by phosphorylating MDMX and inhibiting its activity. <i>Molecular and Cellular Biology</i> , 2014 , 34, 148-57	4.8	69
200	LKB1 and AMPK regulate synaptic remodeling in old age. <i>Nature Neuroscience</i> , 2014 , 17, 1190-7	25.5	69
199	AMP-activated protein kinase α subunit is required for the preservation of hepatic insulin sensitivity by n-3 polyunsaturated fatty acids. <i>Diabetes</i> , 2010 , 59, 2737-46	0.9	68
198	A769662, a novel activator of AMP-activated protein kinase, inhibits non-proteolytic components of the 26S proteasome by an AMPK-independent mechanism. <i>FEBS Letters</i> , 2008 , 582, 2650-4	3.8	68
197	AMP-activated protein kinase modulates tau phosphorylation and tau pathology in vivo. <i>Scientific Reports</i> , 2016 , 6, 26758	4.9	68
196	AMP-activated protein kinase suppresses urate crystal-induced inflammation and transduces colchicine effects in macrophages. <i>Annals of the Rheumatic Diseases</i> , 2016 , 75, 286-94	2.4	67
195	Metformin regulates global DNA methylation via mitochondrial one-carbon metabolism. <i>Oncogene</i> , 2018 , 37, 963-970	9.2	65
194	Beyond energy homeostasis: the expanding role of AMP-activated protein kinase in regulating metabolism. <i>Cell Metabolism</i> , 2015 , 21, 799-804	24.6	65
193	Antagonistic control of muscle cell size by AMPK and mTORC1. <i>Cell Cycle</i> , 2011 , 10, 2640-6	4.7	65
192	The PRKAA1/AMPK α pathway triggers autophagy during CSF1-induced human monocyte differentiation and is a potential target in CMML. <i>Autophagy</i> , 2015 , 11, 1114-29	10.2	64
191	Dual cardiac contractile effects of the alpha2-AMPK deletion in low-flow ischemia and reperfusion. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007 , 292, H3136-47	5.2	64
190	Leishmania infantum modulates host macrophage mitochondrial metabolism by hijacking the SIRT1-AMPK axis. <i>PLoS Pathogens</i> , 2015 , 11, e1004684	7.6	63
189	The anti-diabetic drug metformin does not affect bone mass in vivo or fracture healing. <i>Osteoporosis International</i> , 2013 , 24, 2659-70	5.3	63
188	Activation of AMP-activated protein kinase by vascular endothelial growth factor mediates endothelial angiogenesis independently of nitric-oxide synthase. <i>Journal of Biological Chemistry</i> , 2010 , 285, 10638-52	5.4	63
187	Role of AMP-activated protein kinase in autophagy and proteasome function. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 369, 964-8	3.4	63
186	Inhibition of AMP-activated protein kinase accentuates lipopolysaccharide-induced lung endothelial barrier dysfunction and lung injury in vivo. <i>American Journal of Pathology</i> , 2013 , 182, 1021-30	5.8	62

185	Upstream stimulatory factor-2 (USF2) activity is required for glucose stimulation of L-pyruvate kinase promoter activity in single living islet beta-cells. <i>Journal of Biological Chemistry</i> , 1997 , 272, 20636-40	5.4	62
184	Activation of AMP-activated protein kinase rapidly suppresses multiple pro-inflammatory pathways in adipocytes including IL-1 receptor-associated kinase-4 phosphorylation. <i>Molecular and Cellular Endocrinology</i> , 2017 , 440, 44-56	4.4	61
183	Role of AMPK in UVB-induced DNA damage repair and growth control. <i>Oncogene</i> , 2013 , 32, 2682-9	9.2	61
182	Aberrant endoplasmic reticulum stress in vascular smooth muscle increases vascular contractility and blood pressure in mice deficient of AMP-activated protein kinase- α in vivo. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013 , 33, 595-604	9.4	61
181	AMP activated protein kinase- α regulates expression of estrogen-related receptor- α metabolic transcription factor related to heart failure development. <i>Hypertension</i> , 2011 , 58, 696-703	8.5	61
180	Inactivation of AMPK β induces asthenozoospermia and alters spermatozoa morphology. <i>Endocrinology</i> , 2012 , 153, 3468-81	4.8	61
179	Inhibition of the AMP-activated protein kinase- α accentuates agonist-induced vascular smooth muscle contraction and high blood pressure in mice. <i>Hypertension</i> , 2011 , 57, 1010-7	8.5	60
178	Phosphorylation of Janus kinase 1 (JAK1) by AMP-activated protein kinase (AMPK) links energy sensing to anti-inflammatory signaling. <i>Science Signaling</i> , 2016 , 9, ra109	8.8	59
177	Loss of AMPK exacerbates experimental autoimmune encephalomyelitis disease severity. <i>Biochemical and Biophysical Research Communications</i> , 2009 , 386, 16-20	3.4	58
176	AMPK β -LDH pathway regulates muscle stem cell self-renewal by controlling metabolic homeostasis. <i>EMBO Journal</i> , 2017 , 36, 1946-1962	13	57
175	Translational tolerance of mitochondrial genes to metabolic energy stress involves TISU and eIF1-eIF4GI cooperation in start codon selection. <i>Cell Metabolism</i> , 2015 , 21, 479-92	24.6	57
174	β AMP-activated protein kinase preserves endothelial function during chronic angiotensin II treatment by limiting Nox2 upregulation. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2011 , 31, 560-6	9.4	57
173	GFAT1 phosphorylation by AMPK promotes VEGF-induced angiogenesis. <i>Biochemical Journal</i> , 2017 , 474, 983-1001	3.8	56
172	Peroxisome proliferator-activated receptor γ coactivator 1 β and FoxO3A mediate chondroprotection by AMP-activated protein kinase. <i>Arthritis and Rheumatology</i> , 2014 , 66, 3073-82	9.5	56
171	AMPK controls epithelial Na(+) channels through Nedd4-2 and causes an epithelial phenotype when mutated. <i>Pflügers Archiv European Journal of Physiology</i> , 2009 , 458, 713-21	4.6	56
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