

A mitochondrial uncoupling artifact can be caused by exogenous
in yeast

Biochemical Journal

356, 779-789

DOI: [10.1042/bj3560779](https://doi.org/10.1042/bj3560779)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Mitochondrial uncoupling as a target for drug development for the treatment of obesity. <i>Obesity Reviews</i> , 2001, 2, 255-265.	3.1	216
3	Uncoupling Proteins--How Do They Work and How Are They Regulated. <i>IUBMB Life</i> , 2001, 52, 175-179.	1.5	18
4	No Evidence for a Basal, Retinoic, or Superoxide-induced Uncoupling Activity of the Uncoupling Protein 2 Present in Spleen or Lung Mitochondria. <i>Journal of Biological Chemistry</i> , 2002, 277, 26268-26275.	1.6	150
5	Invited Review: Uncoupling proteins and thermoregulation. <i>Journal of Applied Physiology</i> , 2002, 92, 2187-2198.	1.2	228
6	The Basal Proton Conductance of Skeletal Muscle Mitochondria from Transgenic Mice Overexpressing or Lacking Uncoupling Protein-3. <i>Journal of Biological Chemistry</i> , 2002, 277, 2773-2778.	1.6	180
7	Superoxide Activates Mitochondrial Uncoupling Protein 2 from the Matrix Side. <i>Journal of Biological Chemistry</i> , 2002, 277, 47129-47135.	1.6	355
8	Artifactual uncoupling by uncoupling protein 3 in yeast mitochondria at the concentrations found in mouse and rat skeletal-muscle mitochondria. <i>Biochemical Journal</i> , 2002, 361, 49.	1.7	73
9	Artifactual uncoupling by uncoupling protein 3 in yeast mitochondria at the concentrations found in mouse and rat skeletal-muscle mitochondria. <i>Biochemical Journal</i> , 2002, 361, 49-56.	1.7	107
10	The Uncoupling Proteins Family: From Thermogenesis to the Regulation of ROS. <i>Cell and Molecular Response To Stress</i> , 2002, , 257-268.	0.4	2
11	Uncoupling of protein-3 induces an uncontrolled uncoupling of mitochondria after expression in muscle derived L6 cells. <i>FEBS Journal</i> , 2002, 269, 1373-1381.	0.2	10
12	Superoxide activates mitochondrial uncoupling proteins. <i>Nature</i> , 2002, 415, 96-99.	13.7	1,236
13	Does any yeast mitochondrial carrier have a native uncoupling protein function?. <i>Journal of Bioenergetics and Biomembranes</i> , 2002, 34, 165-176.	1.0	31
14	Conserved properties of hydrogenosomal and mitochondrial ADP/ATP carriers: a common origin for both organelles. <i>EMBO Journal</i> , 2002, 21, 572-579.	3.5	99
15	The oncogenic RAS2val19 mutation locks respiration, independently of PKA, in a mode prone to generate ROS. <i>EMBO Journal</i> , 2003, 22, 3337-3345.	3.5	101
16	Human Uncoupling Protein-3 and Obesity: An Update. <i>Obesity</i> , 2003, 11, 1429-1443.	4.0	68
17	The "Novel" Uncoupling Proteins UCP2 and UCP3: What Do They Really do? Pros and Cons for Suggested Functions. <i>Experimental Physiology</i> , 2003, 88, 65-84.	0.9	203
18	Oxidative phosphorylation, mitochondrial proton cycling, free-radical production and aging. <i>Advances in Cell Aging and Gerontology</i> , 2003, 14, 35-68.	0.1	13
19	A signalling role for 4-hydroxy-2-nonenal in regulation of mitochondrial uncoupling. <i>EMBO Journal</i> , 2003, 22, 4103-4110.	3.5	519

#	ARTICLE	IF	CITATIONS
20	Fasting, lipid metabolism, and triiodothyronine in rat gastrocnemius muscle: interrelated roles of uncoupling protein 3, mitochondrial thioesterase, and coenzyme Q. <i>FASEB Journal</i> , 2003, 17, 1112-1114.	0.2	40
21	Superoxide Stimulates a Proton Leak in Potato Mitochondria That Is Related to the Activity of Uncoupling Protein. <i>Journal of Biological Chemistry</i> , 2003, 278, 22298-22302.	1.6	123
22	Physiological significance of uncoupling protein-3: a role in fatty acid handling?. <i>Advances in Molecular and Cell Biology</i> , 2003, 33, 271-293.	0.1	0
23	Mitochondrial superoxide: production, biological effects, and activation of uncoupling proteins. <i>Free Radical Biology and Medicine</i> , 2004, 37, 755-767.	1.3	900
24	Functional Characterization of a Drosophila Mitochondrial Uncoupling Protein. <i>Journal of Bioenergetics and Biomembranes</i> , 2004, 36, 219-228.	1.0	39
25	Brown Adipose Tissue: Function and Physiological Significance. <i>Physiological Reviews</i> , 2004, 84, 277-359.	13.1	5,263
26	Ubiquinone is not required for proton conductance by uncoupling protein 1 in yeast mitochondria. <i>Biochemical Journal</i> , 2004, 379, 309-315.	1.7	51
27	Secondary-structure characterization by far-UV CD of highly purified uncoupling protein 1 expressed in yeast. <i>Biochemical Journal</i> , 2004, 380, 139-145.	1.7	17
28	The mitochondrial uncoupling-protein homologues. <i>Nature Reviews Molecular Cell Biology</i> , 2005, 6, 248-261.	16.1	580
29	Respiratory uncoupling by UCP1 and UCP2 and superoxide generation in endothelial cell mitochondria. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2005, 288, E71-E79.	1.8	45
30	The basal proton conductance of mitochondria depends on adenine nucleotide translocase content. <i>Biochemical Journal</i> , 2005, 392, 353-362.	1.7	321
31	The reactions catalysed by the mitochondrial uncoupling proteins UCP2 and UCP3. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2005, 1709, 35-44.	0.5	125
32	Mitochondrial UCPs: New insights into regulation and impact. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 480-485.	0.5	123
33	Expression of UCP3 in CHO cells does not cause uncoupling, but controls mitochondrial activity in the presence of glucose. <i>Biochemical Journal</i> , 2006, 393, 431-439.	1.7	48
34	Uncoupling proteins: A role in protection against reactive oxygen species or not?. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 449-458.	0.5	167
35	Functional analysis of skunk cabbage SfUCPB, a unique uncoupling protein lacking the fifth transmembrane domain, in yeast cells. <i>Biochemical and Biophysical Research Communications</i> , 2006, 349, 383-390.	1.0	9
36	Synergy of fatty acid and reactive alkenal activation of proton conductance through uncoupling protein 1 in mitochondria. <i>Biochemical Journal</i> , 2006, 395, 619-628.	1.7	36
37	Enzymic analysis of NADPH metabolism in $\hat{2}$ -lactam-producing <i>Penicillium chrysogenum</i> : Presence of a mitochondrial NADPH dehydrogenase. <i>Metabolic Engineering</i> , 2006, 8, 91-101.	3.6	42

#	ARTICLE	IF	CITATIONS
38	Mitochondrial UCP4 Mediates an Adaptive Shift in Energy Metabolism and Increases the Resistance of Neurons to Metabolic and Oxidative Stress. <i>NeuroMolecular Medicine</i> , 2006, 8, 389-414.	1.8	167
39	Uncoupling protein 1 affects the yeast mitoproteome and oxygen free radical production. <i>Free Radical Biology and Medicine</i> , 2006, 40, 303-315.	1.3	21
40	Mitochondrial uncoupling proteins: New insights from functional and proteomic studies. <i>Free Radical Biology and Medicine</i> , 2006, 40, 1097-1107.	1.3	29
41	Protein-mediated energy-dissipating pathways in mitochondria. <i>Chemico-Biological Interactions</i> , 2006, 161, 57-68.	1.7	11
42	Protein-mediated energy-dissipating pathways in mitochondria. <i>Chemico-Biological Interactions</i> , 2006, 163, 133-144.	1.7	27
43	Mitochondrial depolarization and the role of uncoupling proteins in ischemia tolerance. <i>Cardiovascular Research</i> , 2006, 72, 210-219.	1.8	157
44	Mitoenergetic failure in Alzheimer disease. <i>American Journal of Physiology - Cell Physiology</i> , 2007, 292, C8-C23.	2.1	126
45	Cold-induced alterations of phospholipid fatty acyl composition in brown adipose tissue mitochondria are independent of uncoupling protein-1. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2007, 293, R1086-R1093.	0.9	27
46	The energetic implications of uncoupling protein-3 in skeletal muscle. <i>Applied Physiology, Nutrition and Metabolism</i> , 2007, 32, 884-894.	0.9	35
47	Uncoupling proteins 2 and 3 are fundamental for mitochondrial Ca ²⁺ uniport. <i>Nature Cell Biology</i> , 2007, 9, 445-452.	4.6	307
48	Mitochondrial uncoupling proteins—What is their physiological role?. <i>Free Radical Biology and Medicine</i> , 2007, 43, 1351-1371.	1.3	284
49	UCPs are unlikely calcium porters. <i>Nature Cell Biology</i> , 2008, 10, 1235-1237.	4.6	88
50	UCP2/3 are likely to be fundamental for mitochondrial Ca ²⁺ uniport. <i>Nature Cell Biology</i> , 2008, 10, 1237-1240.	4.6	53
51	An ancient look at UCP1. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 637-641.	0.5	57
52	Mitochondrial Ca ²⁺ , the secret behind the function of uncoupling proteins 2 and 3?. <i>Cell Calcium</i> , 2008, 44, 36-50.	1.1	58
53	Essential Role for Uncoupling Protein-3 in Mitochondrial Adaptation to Fasting but Not in Fatty Acid Oxidation or Fatty Acid Anion Export. <i>Journal of Biological Chemistry</i> , 2008, 283, 25124-25131.	1.6	88
54	Reptilian uncoupling protein: functionality and expression in sub-zero temperatures. <i>Journal of Experimental Biology</i> , 2008, 211, 1456-1462.	0.8	23
55	Long-term fasting decreases mitochondrial avian UCP-mediated oxygen consumption in hypometabolic king penguins. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2008, 295, R92-R100.	0.9	24

#	ARTICLE	IF	CITATIONS
56	Molecular evolution of UCP1 and the evolutionary history of mammalian non-shivering thermogenesis. <i>BMC Evolutionary Biology</i> , 2009, 9, 4.	3.2	67
57	UCP2, a metabolic sensor coupling glucose oxidation to mitochondrial metabolism?. <i>IUBMB Life</i> , 2009, 61, 762-767.	1.5	79
58	Uncoupling protein-1 (UCP1) contributes to the basal proton conductance of brown adipose tissue mitochondria. <i>Journal of Bioenergetics and Biomembranes</i> , 2009, 41, 335-342.	1.0	55
59	Uncoupling proteins: A complex journey to function discovery. <i>BioFactors</i> , 2009, 35, 417-428.	2.6	69
60	HDMCP uncouples yeast mitochondrial respiration and alleviates steatosis in L02 and hepG2 cells by decreasing ATP and H2O2 levels: A novel mechanism for NAFLD. <i>Journal of Hepatology</i> , 2009, 50, 1019-1028.	1.8	40
61	Uncoupling protein 1 inhibition by purine nucleotides is under the control of the endogenous ubiquinone redox state. <i>Biochemical Journal</i> , 2009, 424, 297-306.	1.7	29
62	Uncoupling protein-1 is not leaky. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 773-784.	0.5	78
63	Metabolic consequences of the presence or absence of the thermogenic capacity of brown adipose tissue in mice (and probably in humans). <i>International Journal of Obesity</i> , 2010, 34, S7-S16.	1.6	150
64	Mitochondrial uncoupling protein 2 in pancreatic β cells. <i>Diabetes, Obesity and Metabolism</i> , 2010, 12, 134-140.	2.2	22
65	Not all mitochondrial carrier proteins support permeability transition pore formation: no involvement of uncoupling protein 1. <i>Bioscience Reports</i> , 2010, 30, 187-192.	1.1	11
66	Molecular cloning of lamprey uncoupling protein and assessment of its uncoupling activity using a yeast heterologous expression system. <i>Mitochondrion</i> , 2010, 10, 54-61.	1.6	6
67	Molecular cloning of amphioxus uncoupling protein and assessment of its uncoupling activity using a yeast heterologous expression system. <i>Biochemical and Biophysical Research Communications</i> , 2010, 400, 701-706.	1.0	5
68	Compromised respiratory adaptation and thermoregulation in aging and age-related diseases. <i>Ageing Research Reviews</i> , 2010, 9, 20-40.	5.0	17
69	Test Systems to Study the Structure and Function of Uncoupling Protein 1: A Critical Overview. <i>Frontiers in Endocrinology</i> , 2011, 2, 63.	1.5	13
70	Alterations of glucose-dependent insulinotropic polypeptide (GIP) during cold acclimation. <i>Regulatory Peptides</i> , 2011, 167, 91-96.	1.9	9
71	The Regulation and Physiology of Mitochondrial Proton Leak. <i>Physiology</i> , 2011, 26, 192-205.	1.6	335
72	A High-Throughput Assay for Modulators of NNT Activity in Permeabilized Yeast Cells. <i>Journal of Biomolecular Screening</i> , 2011, 16, 734-743.	2.6	0
73	Renaissance of Brown Adipose Tissue. <i>Hormone Research in Paediatrics</i> , 2011, 75, 231-239.	0.8	47

#	ARTICLE	IF	CITATIONS
74	Emerging characterization of the role of SIRT3-mediated mitochondrial protein deacetylation in the heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 301, H2191-H2197.	1.5	56
75	Phylogenetic differences of mammalian basal metabolic rate are not explained by mitochondrial basal proton leak. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 185-193.	1.2	30
76	Fatty Acids Change the Conformation of Uncoupling Protein 1 (UCP1). <i>Journal of Biological Chemistry</i> , 2012, 287, 36845-36853.	1.6	47
77	Functional characterization of UCP1 in mammalian HEK293 cells excludes mitochondrial uncoupling artefacts and reveals no contribution to basal proton leak. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 1660-1670.	0.5	46
78	Brown Adipose Tissue. , 2012, , 39-69.		11
79	Adipose Tissue Biology. , 2012, , .		16
80	Mitochondrial neuronal uncoupling proteins: a target for potential disease-modification in Parkinson's disease. <i>Translational Neurodegeneration</i> , 2012, 1, 3.	3.6	67
81	Overexpression of membrane proteins from higher eukaryotes in yeasts. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 7671-7698.	1.7	27
82	Trends in Thermostability Provide Information on the Nature of Substrate, Inhibitor, and Lipid Interactions with Mitochondrial Carriers. <i>Journal of Biological Chemistry</i> , 2015, 290, 8206-8217.	1.6	67
83	Uncoupling protein 1 binds one nucleotide per monomer and is stabilized by tightly bound cardiolipin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6973-6978.	3.3	88
84	Mitochondrial ROS regulate thermogenic energy expenditure and sulfenylation of UCP1. <i>Nature</i> , 2016, 532, 112-116.	13.7	341
85	UCPs, at the interface between bioenergetics and metabolism. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2016, 1863, 2443-2456.	1.9	90
86	The Pancreatic β -Cell: A Bioenergetic Perspective. <i>Physiological Reviews</i> , 2016, 96, 1385-1447.	13.1	86
87	Brown Adipose Tissue. , 2017, , 91-147.		21
88	Cell-free production and characterisation of human uncoupling protein 1. <i>Biochemistry and Biophysics Reports</i> , 2017, 10, 276-281.	0.7	3
90	Metabolic Reprogramming in Amyotrophic Lateral Sclerosis. <i>Scientific Reports</i> , 2018, 8, 3953.	1.6	69
91	Evolutionary Genetics of Hypoxia and Cold Tolerance in Mammals. <i>Journal of Molecular Evolution</i> , 2018, 86, 618-634.	0.8	15
92	Elevated UCP1 levels are sufficient to improve glucose uptake in human white adipocytes. <i>Redox Biology</i> , 2019, 26, 101286.	3.9	37

#	ARTICLE	IF	CITATIONS
93	Molecular evolution of thermogenic uncoupling protein 1 and implications for medical intervention of human disease. <i>Molecular Aspects of Medicine</i> , 2019, 68, 6-17.	2.7	4
94	Roquin is a major mediator of iron-regulated changes to transferrin receptor-1 mRNA stability. <i>IScience</i> , 2021, 24, 102360.	1.9	10
95	Mitochondrial proton leaks and uncoupling proteins. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2021, 1862, 148428.	0.5	67
96	Comparative functional analyses of UCP1 to unravel evolution, ecophysiology and mechanisms of mammalian thermogenesis. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2021, 255, 110613.	0.7	2
99	UCP2 as a Cancer Target through Energy Metabolism and Oxidative Stress Control. <i>International Journal of Molecular Sciences</i> , 2022, 23, 15077.	1.8	10