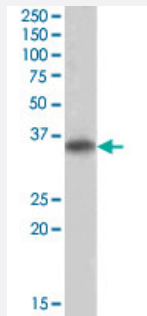


UCP2 polyclonal antibody

Catalog # PAB7242 Size 100 ug

Applications



Western Blot (Tissue lysate)

UCP2 polyclonal antibody (Cat # PAB7242)(0.2 ug/mL) staining of human liver lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of UCP2.
Immunogen	A synthetic peptide corresponding to internal region of human UCP2.
Sequence	C-DSVKQFYTKGSEH
Host	Goat
Theoretical MW (kDa)	33.2
Reactivity	Human
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Recommend Usage	ELISA (1:4000) Western Blot (0.2-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)

Storage Instruction

Store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

UCP2 polyclonal antibody (Cat # PAB7242)(0.2 ug/mL) staining of human liver lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — UCP2

Entrez GeneID[7351](#)**Protein Accession#**[NP_003346.2](#)**Gene Name**

UCP2

Gene Alias

BMIQ4, SLC25A8, UCPH

Gene Description

uncoupling protein 2 (mitochondrial, proton carrier)

Omim ID[601665](#) [601693](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

Mitochondrial uncoupling proteins (UCP) are members of the larger family of mitochondrial anion carrier proteins (MACP). UCPs separate oxidative phosphorylation from ATP synthesis with energy dissipated as heat, also referred to as the mitochondrial proton leak. UCPs facilitate the transfer of anions from the inner to the outer mitochondrial membrane and the return transfer of protons from the outer to the inner mitochondrial membrane. They also reduce the mitochondrial membrane potential in mammalian cells. Tissue specificity occurs for the different UCPs and the exact methods of how UCPs transfer H⁺/OH⁻ are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed in many tissues, with the greatest expression in skeletal muscle. It is thought to play a role in nonshivering thermogenesis, obesity and diabetes. Chromosomal order is 5'-UCP3-UCP2-3'. [provided by RefSeq]

Other Designations

uncoupling protein 2|uncoupling protein-2

Publication Reference

- [Mutant p53 blocks SESN1/AMPK/PGC-1 \$\alpha\$ /UCP2 axis increasing mitochondrial O₂^{-·} production in cancer cells.](#)

Cordani M, Butera G, Dando I, Torrens-Mas M, Butturini E, Pacchiana R, Oppici E, Cavallini C, Gasperini S, Tamassia N, Nadal-Serrano M, Coan M, Rossi D, Gaidano G, Caraglia M, Mariotto S, Spizzo R, Roca P, Oliver J, Scupoli MT, Donadelli M.
British Journal of Cancer 2018 Oct; 119(8):994.

Application: WB-Tr, Human, A-375, AsPC1, MeWo cells

- [UCP2 inhibition triggers ROS-dependent nuclear translocation of GAPDH and autophagic cell death in pancreatic adenocarcinoma cells.](#)

Dando I, Fiorini C, Pozza ED, Padroni C, Costanzo C, Palmieri M, Donadelli M.
Biochimica et Biophysica Acta 2013 Mar; 1833(3):672.

Application: WB, Human, PaCa44 cells

- [Inhibition of UCP2 expression reverses diet-induced diabetes mellitus by effects on both insulin secretion and action.](#)

Claudio T De Souza, Eliana P Araujo, Luiz F Stoppiglia, Jose R Pauli, Eduardo Ropelle, Silvana A Rocco, Rodrigo M Marin, Kleber G Franchini, Jose B Carnevali, Mario J Saad, Antonio C Boschero, Everardo M Carneiro, Lício A Velloso.
FASEB Journal 2007 Apr; 21(4):1153.

Application: WB-Ti, Mouse, Mouse brain, Mouse heart, Mouse gastrocnemius muscle, Mouse pancreatic islets, Mouse spleen, Mouse white adipose tissues

Disease

- [Alzheimer disease](#)
- [Anorexia Nervosa](#)
- [Arthritis](#)
- [Atherosclerosis](#)
- [Body Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bulimia](#)
- [Calcinosis](#)

- [Cardiovascular Diseases](#)
- [Carotid Artery Diseases](#)
- [Cholangitis](#)
- [Chronic Disease](#)
- [Churg-Strauss Syndrome](#)
- [Cognition](#)
- [Colitis](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Crohn Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Diabetic Neuropathies](#)
- [Diabetic Retinopathy](#)
- [Disease Progression](#)
- [Drug Toxicity](#)
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- [Endometrial Neoplasms](#)
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- [Inflammation](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Lupus Erythematosus](#)
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- [Obesity](#)
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- [Spinal Dysraphism](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Venous Thrombosis](#)

- [Weight Gain](#)
- [Weight Loss](#)
- [Werner syndrome](#)