

UCP3 Polyclonal Antibody

Catalog # AP72997

Product Information

Application	WB, E
Primary Accession	P55916
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34216

Additional Information

Gene ID	7352
Other Names	UCP3; SLC25A9; Mitochondrial uncoupling protein 3; UCP 3; Solute carrier family 25 member 9
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	UCP3 {ECO:0000303 PubMed:9180264, ECO:0000312 HGNC:HGNC:12519}
Function	Putative transmembrane transporter that plays a role in mitochondrial metabolism via an as yet unclear mechanism (PubMed: 21775425 , PubMed: 36114012). Originally, this mitochondrial protein was thought to act as a proton transmembrane transporter from the mitochondrial intermembrane space into the matrix, causing proton leaks through the inner mitochondrial membrane, thereby uncoupling mitochondrial membrane potential generation from ATP synthesis (PubMed: 1171965 , PubMed: 12670931 , PubMed: 12734183 , PubMed: 9305858). However, this function is controversial and uncoupling may not be the function, or at least not the main function, but rather a consequence of more conventional metabolite transporter activity (PubMed: 11707458).
Cellular Location	Mitochondrion inner membrane {ECO:0000250 UniProtKB:P56501}; Multi-pass membrane protein
Tissue Location	Only in skeletal muscle and heart (PubMed:9305858). Also expressed in white and brown adipose tissues (PubMed:9305858). Is more expressed in glycolytic

than in oxidative skeletal muscles

Background

UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation. As a result, energy is dissipated in the form of heat. May play a role in the modulation of tissue respiratory control. Participates in thermogenesis and energy balance.

Images



Western Blot analysis of various cells using UCP3 Polyclonal Antibody diluted at 1 : 1000. Secondary antibody was diluted at 1:20000

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