10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

UCP 1/3 Rabbit mAb

Catalog # AP76986

Product Information

Application	WB, IP
Primary Accession	P12242
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from mouse UCP1+UCP3
Purification	Affinity Chromatography
Calculated MW	33248

Additional Information

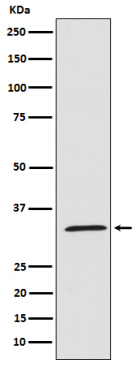
Gene ID	22227
Other Names	Ucp1/Ucp3
Dilution	WB~~1/500-1/1000 IP~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	Ucp1 {ECO:0000312|MGI:MGI:98894}
Function	Mitochondrial transporter that functions as a long-chain fatty acid/LCFA and proton symporter, simultaneously transporting one LCFA and one proton through the inner mitochondrial membrane. However, LCFAs remaining associated with the transporter via their hydrophobic tails, it results in an apparent transport of protons activated by LCFAs. Thereby, dissipates the mitochondrial proton gradient and converts the energy of substrate oxydation into heat instead of ATP (PubMed:23063128). Responsible for thermogenic respiration, a specialized capacity of brown adipose tissue and beige fat that participates in non-shivering adaptive thermogenesis to temperature and diet variations and more generally to the regulation of energy balance (PubMed:19187776, PubMed:23063128, PubMed:27027295, PubMed:9139827). Regulates the production of reactive oxygen species/ROS by mitochondria (PubMed:20416274, PubMed:20466728).

Cellular Location	Mitochondrion inner membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P04633}
Tissue Location	Expressed in brown adipose tissue.

Images



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.