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UCP1 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14934

Product Information

Application	WB
Primary Accession	P25874
Other Accession	NM_021833, NP_068605
Reactivity	Human, Rabbit
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33005

Additional Information

Gene ID	7350
Alias Symbol	SLC25A7, UCP
Other Names	Mitochondrial brown fat uncoupling protein 1, UCP 1, Solute carrier family 25 member 7, Thermogenin, UCP1, SLC25A7, UCP
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-UCP1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	UCP1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

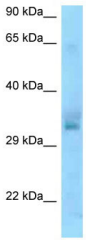
Name	UCP1 (HGNC:12517)
Function	Mitochondrial protein responsible for thermogenic respiration, a specialized capacity of brown adipose tissue and beige fat that participates in non-shivering adaptive thermogenesis to temperature and diet variations and more generally to the regulation of energy balance (By similarity). Functions as a long-chain fatty acid/LCFA and proton symporter, simultaneously transporting one LCFA and one proton through the inner mitochondrial membrane (PubMed:24196960, PubMed:28781081). 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. Regulates the production of reactive oxygen species/ROS by mitochondria (By similarity).
Cellular Location	Mitochondrion inner membrane {ECO:0000250|UniProtKB:P12242}; Multi-pass membrane protein
Tissue Location	Brown adipose tissue..

References

Cassard A.M.,et al.J. Cell. Biochem. 43:255-264(1990).
Bouillaud F.,et al.Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.
Bouillaud F.,et al.Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 434:724-731(2005).
Bouillaud F.,et al.Clin. Sci. 75:21-27(1988).

Images



WB Suggested Anti-UCP1 Antibody Titration: 1.0 µg/ml
Positive Control: Jurkat Whole Cell

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