

# UCP1 antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI14934

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P25874</a>
<b>Other Accession</b>	<a href="#">NM_021833</a> , <a href="#">NP_068605</a>
<b>Reactivity</b>	Human, Rabbit
<b>Predicted</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	33005

## Additional Information

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<b>Gene ID</b>	7350
<b>Alias Symbol</b>	SLC25A7, UCP
<b>Other Names</b>	Mitochondrial brown fat uncoupling protein 1, UCP 1, Solute carrier family 25 member 7, Thermogenin, UCP1, SLC25A7, UCP
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	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.
<b>Precautions</b>	UCP1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	UCP1 ( <a href="#">HGNC:12517</a> )
<b>Function</b>	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: <a href="#">24196960</a> , PubMed: <a href="#">28781081</a> ). 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

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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.

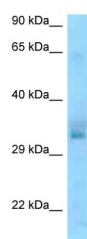
Bouillaud F.,et al.Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.

Hillier L.W.,et al.Nature 434:724-731(2005).

Bouillaud F.,et al.Clin. Sci. 75:21-27(1988).

## Images

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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'.