



# UCP1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-07727
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	UCP1 SLC25A7 UCP
<b>Protein Name</b>	Mitochondrial brown fat uncoupling protein 1 (UCP 1) (Solute carrier family 25 member 7) (Thermogenin)
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	UCP1 Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	33kD
<b>Cell Pathway</b>	Mitochondrion inner membrane ; Multi-pass membrane protein .
<b>Tissue Specificity</b>	Brown adipose tissue.
<b>Function</b>	function:UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation from ATP synthesis. As a result, energy is dissipated in the form of heat.,polymorphism:The Thr-64 polymorphism is associated with an increased waist-to-hip ratio. The Leu-229 polymorphism is associated with susceptibility to type II diabetes mellitus.,similarity:Belongs to the mitochondrial carrier family.,similarity:Contains 3 Solcar repeats.,subunit:Acts as a dimer forming a proton channel.,tissue specificity:Brown adipose tissue.,
<b>Background</b>	Mitochondrial uncoupling proteins (UCP) are members of the 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<sup>+</sup>/OH<sup>-</sup> are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat. [provided by RefSeq, Jul 2008],

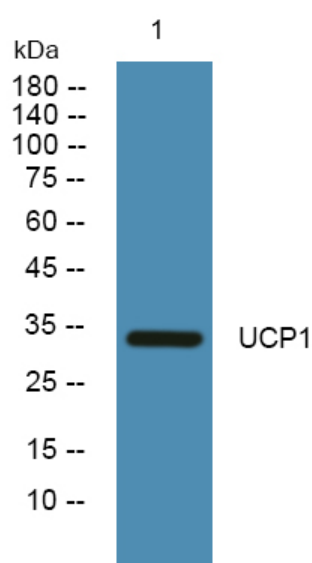
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western blot analysis of lysates from HCT116 cells, primary antibody was diluted at 1:1000, 4° over night