



# UCP4 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-05739
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	SLC25A27 UCP4 UNQ772/PRO1566
<b>Protein Name</b>	Mitochondrial uncoupling protein 4 (UCP 4) (Solute carrier family 25 member 27)
<b>Immunogen</b>	Synthesized peptide derived from human protein . at AA range: 110-190
<b>Specificity</b>	UCP4 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>	35kD
<b>Cell Pathway</b>	Mitochondrion inner membrane; Multi-pass membrane protein.
<b>Tissue Specificity</b>	Found in adult and fetal brain. Present in most of the brain tissues, with low levels in spinal chord, corpus callosum and substantia nigra.
<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. May play a role in thermoregulatory heat production and metabolism in brain.,similarity:Belongs to the mitochondrial carrier family.,similarity:Contains 3 Solcar repeats.,tissue specificity:Found in adult and fetal brain. Present in most of the brain tissues, with low levels in spinal chord, corpus callosum and substantia nigra.,
<b>Background</b>	Mitochondrial uncoupling proteins (UCP) are members of the larger 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. Transcripts of this gene are only detected in brain tissue and are specifically modulated by various environmental conditions. Alternative splicing results in multiple transcript variants.[provided by RefSeq,

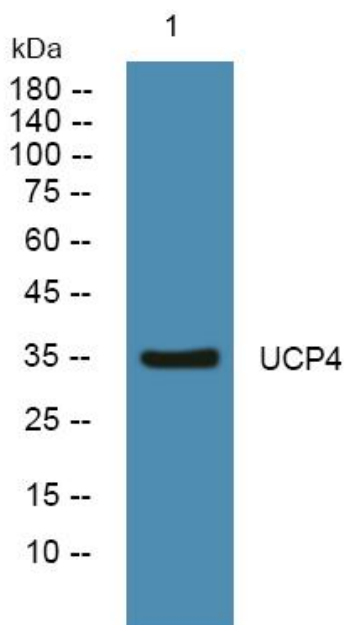
**matters needing attention**

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 A431 cells, primary antibody was diluted at 1:1000, 4° over night