
Product Name: UCP3 Rabbit Polyclonal Antibody**Catalog #: APRab19597**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	33kDa

Antigen Information

Gene Name	UCP3
Alternative Names	UCP3; SLC25A9; Mitochondrial uncoupling protein 3; UCP 3; Solute carrier family 25 member 9
Gene ID	7352.0
SwissProt ID	P55916
Immunogen	The antiserum was produced against synthesized peptide derived from human UCP3. AA range:259-308

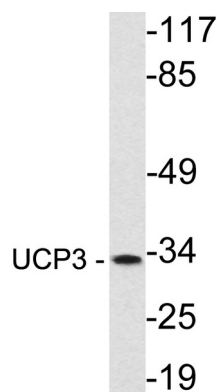
Background

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. The different UCPs have tissue-specific expression; this gene is primarily expressed in skeletal muscle. This gene's protein product is postulated to protect mitochondria against lipid-induced oxidative stress. Expression levels of this gene increase when fatty acid supplies to mitochondria exceed their oxidation capacity and the protein enables the export of fatty acids from mitochondria. disease: Defects in UCP3 may be involved in severe obesity [MIM:601665]., function: UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation. As a result, energy is dissipated in the form of heat. May play a role in the modulation of tissue respiratory control. Participates in thermogenesis and energy balance., similarity: Belongs to the mitochondrial carrier family., similarity: Contains 3 Solcar repeats., tissue specificity: Only in skeletal muscle and heart. Is more expressed in glycolytic than in oxidative skeletal muscles.,

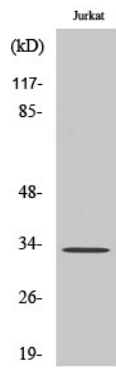
Research Area

Signal Transduction; Metabolism; Mitochondrial; Neuroscience; Neurology process; Cardiovascular; Atherosclerosis; Diabetes associated; Lipids / Lipoproteins; Fatty Acids; Cancer; Cancer Metabolism; Response to hypoxia; Pathways and Processes; Mitochondrial Metabolism; Mitochondrial markers; Metabolism processes; Hypoxia; Diabetes; Obesity; Cancer; Heart disease; Redox metabolism; Fatty acid oxidation

Image Data



Western blot analysis of lysate from Jurkat cells, using UCP3 antibody.



Western Blot analysis of various cells using UCP3 Polyclonal Antibody diluted at 1:1000. Secondary antibody was diluted at 1:20000