

UCP3 Polyclonal Antibody

catalog number: E-AB-93193

Note: Centrifuge before opening to ensure complete recovery of vial contents.

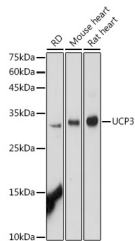
Description

Reactivity	Human;Mouse;Rat
Immunogen	Recombinant fusion protein of human UCP3
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.

Applications

Applications	Recommended Dilution
WB	1:500-1:2000
IHC	1:50-1:200

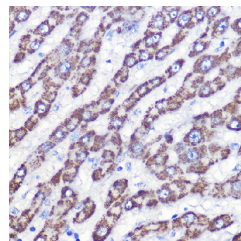
Data



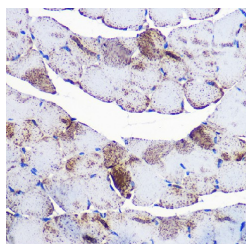
Western blot analysis of extracts of various cell lines using STX17 Polyclonal Antibody at 1:1000 dilution.

Observed-MW:34 kDa

Calculated-MW:22 kDa/29 kDa/34 kDa



Immunohistochemistry of paraffin-embedded human liver using UCP3 Polyclonal Antibody at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry of paraffin-embedded mouse skeletal muscle using UCP3 Polyclonal Antibody at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

For Research Use Only

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. UCPs contain the three solcar protein domains typically found in MACPs. Two splice variants have been found for this gene.