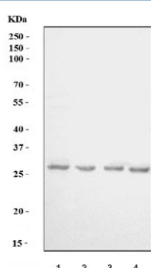


UCP3 Antibody / SLC25A9 (RQ7047)

Catalog No.	Formulation	Size
RQ7047	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P55916
Applications	Western Blot : 0.5-1 ug/ml
Limitations	This UCP3 antibody is available for research use only.



Western blot testing of 1) human HeLa, 2) human A549, 3) rat L6 and 4) mouse C2C12 cell lysate with UCP3 antibody. Predicted molecular weight: 23-34 kDa (multiple isoforms).

Description

Mitochondrial uncoupling protein 3 is a protein that in humans is encoded by the UCP3 gene. 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.

Application Notes

Optimal dilution of the UCP3 antibody should be determined by the researcher.

Immunogen

Amino acids LDTAKVRLQIQGENQAVQTARLVQYR were used as the immunogen for the UCP3 antibody.

Storage

After reconstitution, the UCP3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.