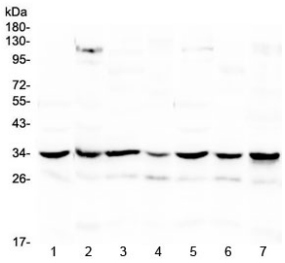
UCP2 Antibody (Middle Region) (R32924)

Catalog No.	Formulation	Size
R32924	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
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
UniProt	P55851
Applications	Western Blot : 0.5-1ug/ml
Limitations	This UCP2 antibody is available for research use only.



Western blot testing of 1) rat spleen, 2) rat heart, 3) rat brain, 4) mouse spleen, 5) mouse heart, 6) mouse brain and 7) human HeLa lysate with UCP2 antibody at 0.5ug/ml. Predicted molecular weight ~34 kDa.

Description

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+/OH- are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed in many tissues, with the greatest expression in skeletal muscle. It is thought to play a role in nonshivering thermogenesis, obesity and diabetes. Chromosomal order is 5'-UCP3-UCP2-3'.

Application Notes

Optimal dilution of the UCP2 antibody should be determined by the researcher.

Immunogen

Amino acids 134-170 (AQPTDVVKVRFQAQARAGGGRRYQSTVNAYKTIAREE) were used as the immunogen for the UCP2 antibody.

Storage

After reconstitution, the UCP2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.