

Product Name: UCP2 Rabbit Polyclonal Antibody
Catalog #: APRab19596



Summary

Production Name	UCP2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	UCP2
Alternative Names	UCP2; SLC25A8; Mitochondrial uncoupling protein 2; UCP 2; Solute carrier family 25 member 8; UCPH
Gene ID	7351.0
SwissProt ID	P55851.The antiserum was produced against synthesized peptide derived from human UCP2. AA range:64-113

Application

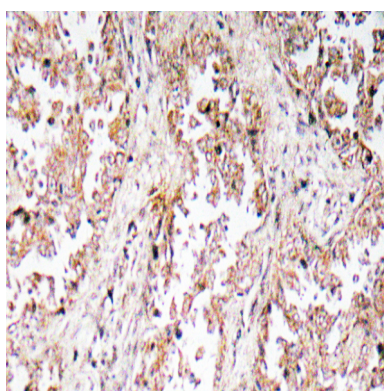
Dilution Ratio	WB 1:500-2000, IHC-P 1:100-1:300, ELISA 1:10000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	

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. 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'. [provisional 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., polymorphism: Genetic variation in UCP2 influences susceptibility to obesity [MIM:607447]; also called body mass index quantitative trait locus type 4 (BMIQ4). Obesity is the most common nutritional disorder in Western society., similarity: Belongs to the mitochondrial carrier family., similarity: Contains 3 Solcar repeats., subunit: Acts as a dimer forming a proton channel., tissue specificity: Widely expressed in adult human tissues, including tissues rich in macrophages. Most expressed in white adipose tissue and skeletal muscle.,

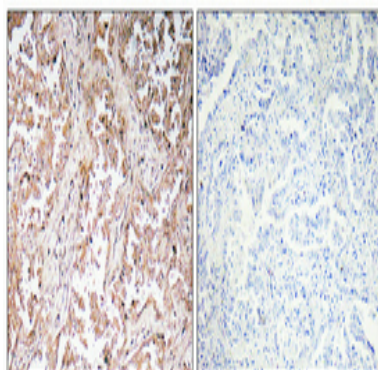
Research Area

Image Data



Immunohistochemistry analysis of UCP2 antibody in paraffin-embedded human lung carcinoma tissue.

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Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4°,overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

Note

For research use only.