

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse UCP2 in Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) UCP1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human UCP2 Met1-Phe309 Accession # P55851
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Mitochondrial Uncoupling Protein 2 (UCP2) is a 33 kDa member of the mitochondrial carrier protein family. UCP2 uncouples respiration from oxidative phosphorylation, principally in fat and skeletal muscle. Unlike UCP1, which generates heat in response to cold, UCP2 generates heat in response to dietary fluctuations. Human UCP2 is 309 amino acid (aa) in length. It contains six transmembrane domains (aa's 11-291) and is embedded in the inner mitochondrial membrane. Here, it dimerizes, forming a proton channel. There is one nucleotide binding site (aa 276-298). Full-length UCP2 shares 94%, 97% and 96% aa identity with porcine, canine and mouse UCP2, respectively.

PRODUCT SPECIFIC NOTICES

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