Datasheet for ABIN7603247

anti-UCP3 antibody (N-Term)

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Overview

Quantity:	100 µg
Target:	UCP3
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This UCP3 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-UCP3 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human UCP3, which shares 73.1% and 76.9% amino acid (aa) sequence identity with mouse and rat UCP3, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-UCP3 Antibody Picoband® (ABIN7603247). Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification:	Immunogen affinity purified.

Target Details

Target:	UCP3
Alternative Name:	UCP3 (UCP3 Products)
Background:	Synonyms: Ubiquitin-like-conjugating enzyme ATG3,6.3.2.-,Autophagy-related protein 3,APG3-like,hApg3,Protein PC3-96,ATG3,APG3, APG3L, Tissue Specificity: Widely expressed, with a highest expression in heart, skeletal muscle, kidney, liver and placenta. . Background: 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.
Molecular Weight:	30 kDa
Gene ID:	7352
UniProt:	P55916
Pathways:	Proton Transport

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Mouse, Rat 1. Argyropoulos, G., Brown, A. M., Willi, S. M., Zhu, J., He, Y., Reitman, M., Gevao, S. M., Spruill, I., Garvey, W. T. Effects of mutations in the human uncoupling protein 3 gene on the respiratory quotient and fat oxidation in severe obesity and type 2 diabetes. J. Clin. Invest. 102: 1345-1351, 1998. 2. Boss, O., Giacobino, J.-P., Muzzin, P. Genomic structure of uncoupling protein-3 (UCP3)

Application Details

	and its assignment to chromosome 11q13. Genomics 47: 425-426, 1998. 3. Boss, O., Samec, S., Paoloni-Giacobino, A., Rossier, C., Dulloo, A., Seydoux, J., Muzzin, P., Giacobino, J.-P. Uncoupling protein-3: a new member of the mitochondrial carrier family with tissue-specific expression. FEBS Lett. 408: 39-42, 1997.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.