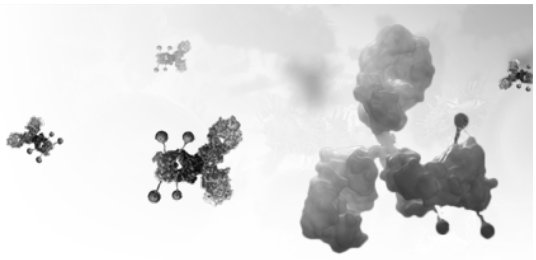

Human UCP3 peptide (DAG-P0009)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen 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. The different UCPs have tissue-specific expression; this gene is primarily expressed in skeletal muscle. This genes 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.[provided by RefSeq, Nov 2008]
Specificity	Only in skeletal muscle and heart. Is more expressed in glycolytic than in oxidative skeletal muscles.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the mitochondrial carrier family.Contains 3 Solcar repeats.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

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Gene Name	UCP3 uncoupling protein 3 (mitochondrial, proton carrier) [Homo sapiens (human)]
Official Symbol	UCP3
Synonyms	UCP3; uncoupling protein 3 (mitochondrial, proton carrier); SLC25A9; mitochondrial uncoupling protein 3; solute carrier family 25 member 9;
Entrez Gene ID	7352
mRNA Refseq	NM_003356.3
Protein Refseq	NP_003347.1
UniProt ID	P55916
Chromosome Location	11q13.4
Pathway	Diurnally regulated genes with circadian orthologs, organism-specific biosystem; Electron Transport Chain, organism-specific biosystem; Energy Metabolism, organism-specific biosystem; Metabolism, organism-specific biosystem; Mitochondrial Uncoupling Proteins, organism-specific biosystem; Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins., organism-specific biosystem; The citric acid (TCA) cycle and respiratory electron transport, o
Function	oxidative phosphorylation uncoupler activity; protein binding; transporter activity;

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