



# UCP1 blocking peptide (CDBP6398)

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

## PRODUCT INFORMATION

|                            |   |
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| <b>Antigen Description</b> | Mitochondrial uncoupling proteins (UCP) are members of the 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 <sup>+</sup> /OH <sup>-</sup> are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat. [provided by RefSeq, Jul 2008] |
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|----------------------|--|
| <b>Conjugate</b>     | Unconjugated   |
| <b>Applications</b>  | Used as a blocking peptide in immunoblotting applications. |
| <b>Format</b>        | Liquid   |
| <b>Concentration</b> | 200 µg/mL  |
| <b>Size</b>          | 0.05 mg  |
| <b>Preservative</b>  | None   |
| <b>Storage</b>       | -20°C  |

## GENE INFORMATION

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|------------------------|--|
| <b>Gene Name</b>       | <a href="#">UCP1 uncoupling protein 1 (mitochondrial, proton carrier) [ Homo sapiens (human) ]</a> |
| <b>Official Symbol</b> | UCP1   |
| <b>Synonyms</b>        | UCP1; uncoupling protein 1 (mitochondrial, proton carrier); UCP; SLC25A7; mitochondrial            |

brown fat uncoupling protein 1; thermogenin; solute carrier family 25 member 7

|                       |   |
|-----------------------|---|
| <b>Entrez Gene ID</b> | <a href="#">7350</a>  |
| <b>mRNA Refseq</b>    | <a href="#">NM_021833</a>   |
| <b>Protein Refseq</b> | <a href="#">NP_068605</a>   |
| <b>UniProt ID</b>     | P25874  |
| <b>Pathway</b>        | Adipogenesis; Electron Transport Chain; Huntington's disease; Metabolism; Mitochondrial Uncoupling Proteins; PPAR signaling pathway; Respiratory electron transport; The citric acid (TCA) cycle and respiratory electron transport |
| <b>Function</b>       | oxidative phosphorylation uncoupler activity  |