

Product Information

MemDX™ Membrane Protein Human UCP1 (Uncoupling protein 1) Expressed in Yeast with 6xHis tag at the N-terminus for Antibody Discovery, Partial (2-307aa)

Cat. No.: **MPX4344K**

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

This product is a 34.9kDa Human UCP1 membrane protein expressed in Yeast. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

UCP1

Protein Length

Partial (2-307aa)

Protein Class

Transporter; Ion channel

Molecular Weight

34.9kDa

TMD

6

Sequence

GGLTASDVHPTLGVQLFSAGIAACLADVITFPLDTAKVRLQVQGECPTSSVIRYKGVLTITAVVKTEGRMKLYSGLPAGLQRQISSA

Product Description

Expression Systems

Yeast

Tag

6xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Purity

>90% as determined by SDS-PAGE

Buffer

Tris-based buffer, 50% glycerol

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target**Target Protein**

UCP1

Full Name

Uncoupling protein 1

Introduction

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⁺/OH⁻ 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.

Alternative Names

UCP1; UCP; SLC25A7; mitochondrial brown fat uncoupling protein 1; solute carrier family 25 member 7; thermogenin; uncoupling protein 1 (mitochondrial, proton carrier); Uncoupling protein 1

Gene ID

[7350](#)

UniProt ID

[P25874](#)