

# **Product Information**

# MemDX™ Membrane Protein Human CPT1A (Carnitine palmitoyltransferase 1A) for Antibody Discovery

Cat. No.: MP0879J

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

This product is a 88.2 kDa Human CPT1A membrane protein expressed in HEK293T. 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** 

CPT1A

**Protein Length** 

Full-length

**Protein Class** 

Druggable Genome, Transmembrane

**Molecular Weight** 

88.2 kDa

**TMD** 

1

### Sequence

MAEAHQAVAFQFTVTPDGIDLRLSHEALRQIYLSGLHSWKKKFIRFKNGIITGVYPASPSSWLIVVVGVM TTMYAKIDPSLGIIAKINRTLETANCMSSQTKNVVSGVLFGTGLWVALIVTMRYSLKVLLSYHGWMFTEH GKMSRATKIWMGMVKIFSGRKPMLYSFQTSLPRLPVPAVKDTVNRYLQSVRPLMKEEDFKRMTALAQDFA VGLGPRLQWYLKLKSWWATNYVSDWWEEYIYLRGRGPLMVNSNYYAMDLLYILPTHIQAARAGNAIHAIL LYRRKLDREEIKPIRLLGSTIPLCSAQWERMFNTSRIPGEETDTIQHMRDSKHIVVYHRGRYFKVWLYHD GRLLKPREMEQQMQRILDNTSEPQPGEARLAALTAGDRVPWARCRQAYFGRGKNKQSLDAVEKAAFFVTL DETEEGYRSEDPDTSMDSYAKSLLHGRCYDRWFDKSFTFVVFKNGKMGLNAEHSWADAPIVAHLWEYVMS IDSLQLGYAEDGHCKGDINPNIPYPTRLQWDIPGECQEVIETSLNTANLLANDVDFHSFPFVAFGKGIIK KCRTSPDAFVQLALQLAHYKDMGKFCLTYEASMTRLFREGRTETVRSCTTESCDFVRAMVDPAQTVEQRL KLFKLASEKHQHMYRLAMTGSGIDRHLFCLYVVSKYLAVESPFLKEVLSEPWRLSTSQTPQQQVELFDLE NNPEYVSSGGGFGPVADDGYGVSYILVGENLINFHISSKFSCPETDSHRFGRHLKEAMTDIITLFGLSSN SKK

# **Product Description**

#### **Expression Systems**

#### HEK293T

#### Tag

C-Myc/DDK

#### **Form**

Liquid

#### **Purification**

Anti-DDK affinity column followed by conventional chromatography steps

### **Purity**

> 80% as determined by SDS-PAGE and Coomassie blue staining

#### **Buffer**

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

#### **Storage**

Store at +4°C for up to one week or several months at -80°C

# **Target**

# **Target Protein**

CPT1A

#### **Full Name**

Carnitine palmitoyltransferase 1A

#### Introduction

The mitochondrial oxidation of long-chain fatty acids is initiated by the sequential action of carnitine palmitoyltransferase I (which is located in the outer membrane and is detergent-labile) and carnitine palmitoyltransferase II (which is located in the inner membrane and is detergent-stable), together with a carnitine-acylcarnitine translocase. CPT I is the key enzyme in the carnitine-dependent transport across the mitochondrial inner membrane and its deficiency results in a decreased rate of fatty acid beta-oxidation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

#### **Alternative Names**

CPT1; CPT1-L; L-CPT1

#### Gene ID

1374

### **UniProt ID**

P50416