

# Product Information

## MemDX™ Membrane Protein Human ABCD1 (ATP binding cassette subfamily D member 1) for Antibody Discovery

Cat. No.: **MP0008X**

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

This product is a 109.3 kDa Human ABCD1 membrane protein expressed in *in vitro* wheat germ expression system. 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

ABCD1

#### Protein Length

Full-length

#### Molecular Weight

109.3 kDa

#### TMD

5

#### Sequence

MPVLSRPRPWGNTLKRTAVLLALAAYGAHKVYPLVRQCLAPARGLQAPAGEPTQEASGVAAAKAGMNRVFLQRLWLLRLLFPR

### Product Description

#### Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

#### Expression Systems

*in vitro* wheat germ expression system

#### Tag

GST-tag at N-terminal

#### Form

Liquid

#### Purification

Glutathione Sepharose 4 Fast Flow

**Buffer**

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer

**Storage**

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

**Target****Target Protein**

ABCD1

**Full Name**

ATP binding cassette subfamily D member 1

**Introduction**

The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ALD subfamily, which is involved in peroxisomal import of fatty acids and/or fatty acyl-CoAs in the organelle. All known peroxisomal ABC transporters are half transporters which require a partner half transporter molecule to form a functional homodimeric or heterodimeric transporter. This peroxisomal membrane protein is likely involved in the peroxisomal transport or catabolism of very long chain fatty acids. Defects in this gene have been identified as the underlying cause of adrenoleukodystrophy, an X-chromosome recessively inherited demyelinating disorder of the nervous system.

**Alternative Names**

ABC42; ALD; ALDP; AMN; OTTHUMP00000025960; adrenoleukodystrophy protein

**Gene ID**

[215](#)

**UniProt ID**

[P33897](#)