

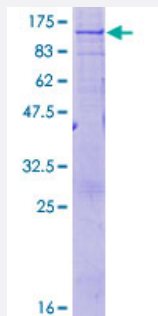
Full-Length

ABCD1 (Human) Recombinant Protein (P01)

Catalog # H00000215-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ABCD1 full-length ORF (NP_000024.2, 1 a.a. - 745 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MPVLSRPRPWRGNTLKRTAVLLALAAAYGAHKVYPLVRQCLAPARGLQAPAGEPTQEASGVAAA
KAGMNRVFLQRLWLLRLLFPRVLCRETGLLALHSAALVSRTFLSVYVARLDGRLARCVRKDPR
AFGWQLLQWLLIALPATFVNSAIRYLEGQLALSFRSRLVAHAYRLYFSQQTYYRVSNMDGRLRNP
QSLTEDVVAFAASVAHLYSNLTKPLLDVAVTSYLLRAARSRGAGTAWPSAIGLVVFLTANVLR
FSPKFGELVAEEARRKGELRYMHSRVVANSEEAFYGGHEVELALLQRSYQDLASQINLILLERLW
YVMLEQFLMKYVWSASGLLMVAVPIITATGYSESDAEAVKKAALKKEEELVSETEAFTIARNLL
TAAADAIERIMSSYKEVTELAGYTARVHEMFQVFEDVQRCHFVKRPRELEDAQAGSGTIGRSGVRV
EGPLKIRGQVVDVEQGIICENIPVTPSGEVVVASLNIRVEEGMHLLITGPNGCGKSSLFRILGGLWP
TYGGVLYKPPPQRMFYIPQRPYMSVGSRLDQVIYPDSDVMQRKGYSEQDLEAILDVVHLHHILQR
EGGWEAMCDWKDVLSGGEKQRIGMARMFYHRPKYALLDECTSAVSIDVEGKIFQAAKDAGIALL
SITHRPSLWKYHTHLLQFDGEGGWKFEKLDSAARLSL TEEKQRLEQQLAGIPKMQRRLQELCQIL
GEAVAPAHVPAPSPQGPGLQGAST

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

109.3

Interspecies Antigen Sequence

Mouse (92); Rat (91)

Preparation Method

[in vitro wheat germ expression system](#)

Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

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

Gene Info — ABCD1

Entrez GeneID	215
GeneBank Accession#	NM_000033.2
Protein Accession#	NP_000024.2
Gene Name	ABCD1
Gene Alias	ABC42, ALD, ALDP, AMN
Gene Description	ATP-binding cassette, sub-family D (ALD), member 1
Omim ID	300100 300371
Gene Ontology	Hyperlink

Gene Summary

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. [provided by RefSeq]

Other Designations

OTTHUMP00000025960|adrenoleukodystrophy protein

Pathway

- [ABC transporters](#)

Disease

- [Adrenoleukodystrophy](#)
- [Alzheimer disease](#)
- [Cerebral Amyloid Angiopathy](#)
- [Genetic Predisposition to Disease](#)
- [Neuroblastoma](#)