

ALDP / ABCD1 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS14833**Specification**

ALDP / ABCD1 Antibody - Product Information

Application	IHC
Primary Accession	P33897
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	83kDa KDa

ALDP / ABCD1 Antibody - Additional Information**Gene ID** 215**Other Names**

ATP-binding cassette sub-family D member 1, Adrenoleukodystrophy protein, ALDP, ABCD1, ALD

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

ALDP / ABCD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ALDP / ABCD1 Antibody - Protein Information**Name** ABCD1 ([HGNC:61](#))**Synonyms** ALD**Function**

ATP-dependent transporter of the ATP-binding cassette (ABC) family involved in the transport of very long chain fatty acid (VLCFA)- CoA from the cytosol to the peroxisome lumen (PubMed:11248239, PubMed:15682271, PubMed:16946495, PubMed:18757502, PubMed:21145416, PubMed:23671276, PubMed:29397936, PubMed:33500543). Coupled to the ATP- dependent transporter activity has also a fatty acyl-CoA thioesterase activity (ACOT) and hydrolyzes VLCFA-CoA into VLCFA prior their ATP- dependent transport into peroxisomes, the ACOT activity is essential during this transport process (PubMed:29397936, PubMed:29397936, PubMed:29397936).

[33500543](http://www.uniprot.org/citations/33500543)). Thus, plays a role in regulation of VLCFAs and energy metabolism namely, in the degradation and biosynthesis of fatty acids by beta-oxidation, mitochondrial function and microsomal fatty acid elongation (PubMed: [21145416](http://www.uniprot.org/citations/21145416), PubMed: [23671276](http://www.uniprot.org/citations/23671276)). Involved in several processes; namely, controls the active myelination phase by negatively regulating the microsomal fatty acid elongation activity and may also play a role in axon and myelin maintenance. Controls also the cellular response to oxidative stress by regulating mitochondrial functions such as mitochondrial oxidative phosphorylation and depolarization. And finally controls the inflammatory response by positively regulating peroxisomal beta-oxidation of VLCFAs (By similarity).

Cellular Location

Peroxisome membrane; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein Endoplasmic reticulum membrane; Multi-pass membrane protein

Volume

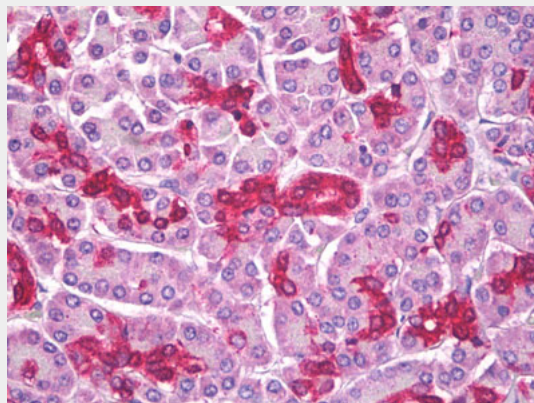
50 μ l

ALDP / ABCD1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ALDP / ABCD1 Antibody - Images



Anti-ABCD1 antibody IHC of human pancreas.

ALDP / ABCD1 Antibody - Background

Probable transporter. The nucleotide-binding fold acts as an ATP-binding subunit with ATPase activity.

ALDP / ABCD1 Antibody - References

- Mosser J.,et al.Nature 361:726-730(1993).
Ross M.T.,et al.Nature 434:325-337(2005).
Liu L.X.,et al.J. Biol. Chem. 274:32738-32743(1999).
Roerig P.,et al.FEBS Lett. 492:66-72(2001).
Aubourg P.,et al.Biochimie 75:293-302(1993).