

ABCD1/ALD Rabbit mAb
Catalog # AP78833**Specification****ABCD1/ALD Rabbit mAb - Product Information**

Application	WB
Primary Accession	P33897
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	82937

ABCD1/ALD Rabbit mAb - Additional Information

Gene ID 215

Other Names

ABCD1

Dilution

WB~~1/500-1/1000

Format

Liquid

ABCD1/ALD Rabbit mAb - Protein InformationName 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](http://www.uniprot.org/citations/11248239), PubMed:[15682271](http://www.uniprot.org/citations/15682271), PubMed:[16946495](http://www.uniprot.org/citations/16946495), PubMed:[18757502](http://www.uniprot.org/citations/18757502), PubMed:[21145416](http://www.uniprot.org/citations/21145416), PubMed:[23671276](http://www.uniprot.org/citations/23671276), PubMed:[29397936](http://www.uniprot.org/citations/29397936), PubMed:[33500543](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/29397936), PubMed:[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, PubMed: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

ABCD1/ALD Rabbit mAb - 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](#)

ABCD1/ALD Rabbit mAb - Images

