

**Anti-ABCD1 / ALD Rabbit Monoclonal Antibody**  
Catalog # ABO16628**Specification****Anti-ABCD1 / ALD Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	<a href="#">P33897</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-ABCD1 / ALD Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-ABCD1 / ALD Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 215

**Other Names**

ATP-binding cassette sub-family D member 1 {ECO:0000312|HGNC:HGNC:61}, 3.1.2.-, 7.6.2.-, Adrenoleukodystrophy protein, ALDP, ABCD1 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=61](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=61)), ALD

**Application Details**

WB 1:500-1:2000<br>ICC/IF 1:50-1:200<br>FC 1:50

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human ABCD1 / ALD

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-ABCD1 / ALD Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/11248239" target="\_blank">11248239</a>, PubMed:<a href="http://www.uniprot.org/citations/15682271" target="\_blank">15682271</a>, PubMed:<a href="http://www.uniprot.org/citations/16946495" target="\_blank">16946495</a>, PubMed:<a href="http://www.uniprot.org/citations/18757502" target="\_blank">18757502</a>, PubMed:<a href="http://www.uniprot.org/citations/21145416" target="\_blank">21145416</a>, PubMed:<a href="http://www.uniprot.org/citations/23671276" target="\_blank">23671276</a>, PubMed:<a href="http://www.uniprot.org/citations/29397936" target="\_blank">29397936</a>, PubMed:<a href="http://www.uniprot.org/citations/33500543" target="\_blank">33500543</a>). 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:<a href="http://www.uniprot.org/citations/29397936" target="\_blank">29397936</a>, PubMed:<a href="http://www.uniprot.org/citations/33500543" target="\_blank">33500543</a>). 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:<a href="http://www.uniprot.org/citations/21145416" target="\_blank">21145416</a>, PubMed:<a href="http://www.uniprot.org/citations/23671276" target="\_blank">23671276</a>). 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

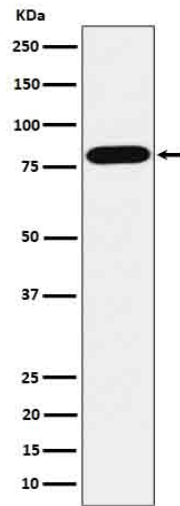
## Anti-ABCD1 / ALD Rabbit Monoclonal Antibody - Protocols

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](#)

## Anti-ABCD1 / ALD Rabbit Monoclonal Antibody - Images





Western blot analysis of ABCD1 / ALD in HepG2 cell lysate.