

AP09620PU-N**Polyclonal Antibody to ABCD1 / ALDP - Aff - Purified****Alternate names:**

ATP-binding cassette sub-family D member 1

Quantity:

0.1 mg

Concentration:

0.5 mg/ml

Background:

ABCD1 belongs to the ALD subfamily, of the superfamily of ATP-binding cassette (ABC) transporters and 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.

Uniprot ID:[P33897](#)**NCBI:**[NP_000024.2](#)**GeneID:**[215](#)**Host:**

Goat

Immunogen:

Peptide with sequence C-EDMQRKGYSEQD, from the internal region of the protein sequence according to NP_000024.2.

Format:**State:** Liquid purified IgG fraction.**Purification:** Ammonium Sulphate Precipitation followed by antigen Affinity Chromatography using the immunizing peptide.**Buffer System:** Tris saline, pH 7.3 containing 0.02% Sodium Azide as preservative and 0.5% BSA as stabilizer.**Applications:****Peptide ELISA:** Antibody Detection Limit Dilution: 1/32000.**Western Blot:** Preliminary experiments gave an approx. 50kDa band in Human Brain (Cerebellum) lysates after 1µg/ml antibody staining. Please note that currently we cannot find an explanation in the literature for the band we observe given the calculated size of 82.9kDa according to NP_000024.2. The 50kDa band was successfully blocked by incubation with the immunizing peptide.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody recognizes ABCD1 (Internal).

Species Reactivity:**Tested:** Human.**Storage:**

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Höftberger R, Kunze M, Weinhofer I, Aboul-Enein F, Voigtländer T, Oezen I, et al. Distribution and cellular localization of adrenoleukodystrophy protein in human tissues: implications for X-linked adrenoleukodystrophy. *Neurobiol Dis.* 2007 Nov;28(2):165-74. Epub 2007 Aug 29. PubMed PMID: 17761426.

Pictures:

HEK293 overexpressing human ABCD1 and probed with TA305801 at 1ug/ml (mock transfection in first lane).

