

ABCD2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9627c**Specification**

ABCD2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O9UBJ2
Other Accession	O9OY44 , O61285
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	83233
Antigen Region	269-298

ABCD2 Antibody (Center) - Additional Information**Gene ID** 225**Other Names**

ATP-binding cassette sub-family D member 2, Adrenoleukodystrophy-like 1, Adrenoleukodystrophy-related protein, hALDR, ABCD2, ALD1, ALDL1, ALDR, ALDRP

Target/Specificity

This ABCD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 269-298 amino acids from the Central region of human ABCD2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ABCD2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ABCD2 Antibody (Center) - Protein Information**Name** ABCD2 ([HGNC:66](#))

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:[21145416](#), PubMed:[29397936](#)). Like ABCD1 seems to have fatty acyl-CoA thioesterase (ACOT) and ATPase activities, according to this model, VLCFA-CoA as free VLCFA is transported in an ATP-dependent manner into peroxisomes after the hydrolysis of VLCFA-CoA mediated by the ACOT activity of ABCD2 (Probable) (PubMed:[29397936](#)). Shows overlapping substrate specificities with ABCD1 toward saturated fatty acids (FA) and monounsaturated FA (MUFA) but has a distinct substrate preference for shorter VLCFA (C22:0) and polyunsaturated fatty acid (PUFA) such as C22:6-CoA and C24:6-CoA (in vitro) (PubMed:[21145416](#)). Thus, may play a role in regulation of VLCFAs and energy metabolism namely, in the degradation and biosynthesis of fatty acids by beta-oxidation (PubMed:[21145416](#)).

Cellular Location

Peroxisome membrane; Multi-pass membrane protein

Tissue Location

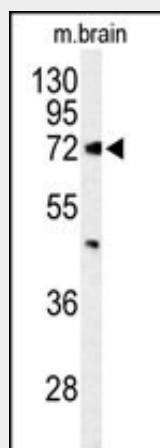
Predominantly expressed in brain and heart.

ABCD2 Antibody (Center) - 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](#)

ABCD2 Antibody (Center) - Images



Western blot analysis of ABCD2 Antibody (Center) (Cat. #AP9627c) in mouse brain tissue lysates (35ug/lane). ABCD2 (arrow) was detected using the purified Pab.

ABCD2 Antibody (Center) - Background

ABCD2 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. The function of this peroxisomal membrane protein is unknown; however this protein is speculated to function as a dimerization partner of ABCD1 and/or other peroxisomal ABC transporters.

ABCD2 Antibody (Center) - References

Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)
Maier, E.M., et al. Biochem. Biophys. Res. Commun. 377(1):176-180(2008)
Lu, Y., et al. J. Lipid Res. 49(12):2582-2589(2008)