

ALDH3A2 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1468D

Specification

ALDH3A2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P,E <u>P51648</u> Human Rabbit Polyclonal Rabbit IgG 54848

ALDH3A2 Antibody - Additional Information

Gene ID 224

Other Names

Fatty aldehyde dehydrogenase, Aldehyde dehydrogenase 10, Aldehyde dehydrogenase family 3 member A2, Microsomal aldehyde dehydrogenase, ALDH3A2, ALDH10, FALDH

Target/Specificity

This ALDH3A2 antibody is generated from rabbits immunized with human ALDH3A2 recombinant protein.

Dilution WB~~1:1000 IHC-P~~1:50~100

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

ALDH3A2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ALDH3A2 Antibody - Protein Information

Name ALDH3A2

Function Catalyzes the oxidation of medium and long chain aliphatic aldehydes to fatty acids. Active on a variety of saturated and unsaturated aliphatic aldehydes between 6 and 24 carbons in length (PubMed:<u>9133646</u>, PubMed:<u>22633490</u>, PubMed:<u>25047030</u>, PubMed:<u>18035827</u>,



PubMed:<u>9662422</u>, PubMed:<u>18182499</u>). Responsible for conversion of the sphingosine 1-phosphate (S1P) degradation product hexadecenal to hexadecenoic acid (PubMed:<u>22633490</u>).

Cellular Location Microsome membrane; Single-pass membrane protein. Endoplasmic reticulum membrane; Single-pass membrane protein; Cytoplasmic side {ECO:0000250|UniProtKB:P30839}

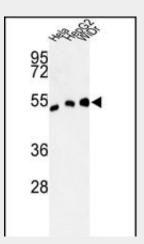
Tissue Location Detected in liver (at protein level).

ALDH3A2 Antibody - Protocols

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

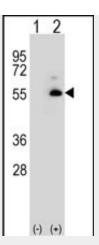
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ALDH3A2 Antibody - Images

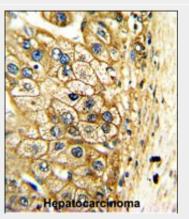


Western blot analysis of ALDH3A2 Antibody (Cat. #AP1468d) in Hela, HepG2, WiDr cell line lysates (35ug/lane). ALDH3A2 (arrow) was detected using the purified Pab.





Western blot analysis of ALDH3A2 (arrow) using rabbit polyclonal ALDH3A2 Antibody (Cat. #AP1468d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ALDH3A2 gene.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with ALDH3A2 Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ALDH3A2 Antibody - Background

Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. ALDH3A2 catalyzes the oxidation of long-chain aliphatic aldehydes to fatty acid. Mutations in the gene cause Sjogren-Larsson syndrome.

ALDH3A2 Antibody - References

Chang, C., et al., Genomics 40(1):80-85 (1997). Rogers, G.R., et al., Genomics 39(2):127-135 (1997). De Laurenzi, V., et al., Nat. Genet. 12(1):52-57 (1996). Rogers, G.R., et al., Am. J. Hum. Genet. 57(5):1123-1129 (1995). Pigg, M., et al., Nat. Genet. 8(4):361-364 (1994).