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Anti-ALDH3A2 Picoband Antibody
Catalog # ABO12667

Specification

Anti-ALDH3A2 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P51648
Host	**Rabbit**
Reactivity	**Human, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Fatty aldehyde dehydrogenase(ALDH3A2) detection. Tested with WB, IHC-P in Human;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ALDH3A2 Picoband Antibody - Additional Information

Gene ID 224

Other Names
Fatty aldehyde dehydrogenase, 1.2.1.3, Aldehyde dehydrogenase 10, Aldehyde dehydrogenase family 3 member A2, Microsomal aldehyde dehydrogenase, ALDH3A2, ALDH10, FALDH

Calculated MW
54848 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization
Endoplasmic reticulum membrane ; Single-pass membrane protein ; Cytoplasmic side .

Protein Name
Fatty aldehyde dehydrogenase

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human ALDH3A2 recombinant protein (Position: M1-Q100). Human ALDH3A2 shares 78% amino acid (aa) sequence identity with both mouse and rat ALDH3A2.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-ALDH3A2 Picoband 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:18035827, PubMed:18182499, PubMed:22633490, PubMed:25047030, PubMed:9133646, PubMed:9662422). Responsible for conversion of the sphingosine 1-phosphate (S1P) degradation product hexadecenal to hexadecenoic acid (PubMed:22633490).

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).

Anti-ALDH3A2 Picoband 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 Cytomety
- Cell Culture

Anti-ALDH3A2 Picoband Antibody - Images

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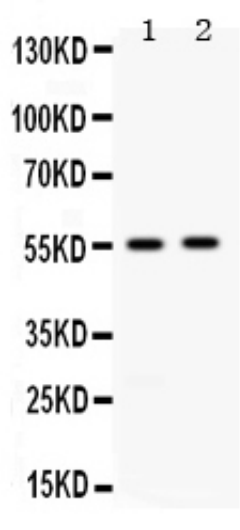
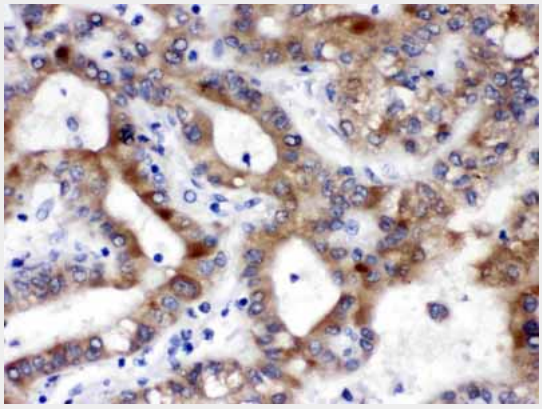


Western blot analysis of ALDH3A2 expression in rat liver extract (lane 1) and 22RV1 whole cell lysates (lane 2). ALDH3A2 at 55KD was detected using rabbit anti- ALDH3A2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12667) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .



ALDH3A2 was detected in paraffin-embedded sections of human liver cancer tissues using rabbit anti- ALDH3A2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12667) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-ALDH3A2 Picoband Antibody - Background

Fatty aldehyde dehydrogenase (or Long-chain-aldehyde dehydrogenase) is an aldehyde dehydrogenase enzyme that in human is encoded in the ALDH3A2 gene on chromosome 17. ALDH3A2 catalyzes the oxidation of long-chain aliphatic aldehydes into fatty acids. It is known to act on a variety of both saturated and unsaturated aliphatic aldehydes between 6 to 24 carbons in length, as well as dihydrophytal, a 20-carbon branched chain aldehyde. It requires NAD+ as a co-factor. The encoded enzyme is responsible for conversion of the sphingosine 1-phosphate (S1P) degradation product hexadecenal to hexadecenoic acid. ALD3H2 is expressed in the human liver and has been found to localize the microsome fraction inside the cell.