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Anti-ALDH3A2 Picoband Antibody

Catalog # ABO12667

Product Information

Application	WB, IHC-P
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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Endoplasmic reticulum membrane ; Single-pass membrane protein ; Cytoplasmic side .
Source	Eukaryota
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.

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).

Background

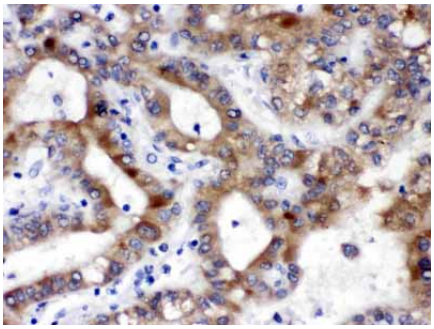
Fatty aldehyde dehydrogenase (or Long-chain-aldehyde dehydrogenase) is an aldehyde dehydrogenase enzyme that in human is encoded in the ALDH3A2 gene on chromosome 17. ALDH3A2 catalyzes the oxidation of long-chain aliphatic aldehydes into fatty acids. It is known to act on a variety of both saturated 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.

Images



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 □¼g/mL. The immunohistochemical section was developed using SABC method .



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