10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-ALDH1B1 Antibody

Catalog # AP59479

Product Information

Application	WB, IHC
Primary Accession	P30837
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57249

Additional Information

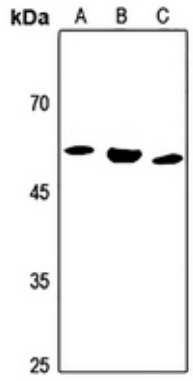
Gene ID	219
Other Names	ALDH5; ALDHX; Aldehyde dehydrogenase X mitochondrial; Aldehyde dehydrogenase 5; Aldehyde dehydrogenase family 1 member B1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ALDH1B1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

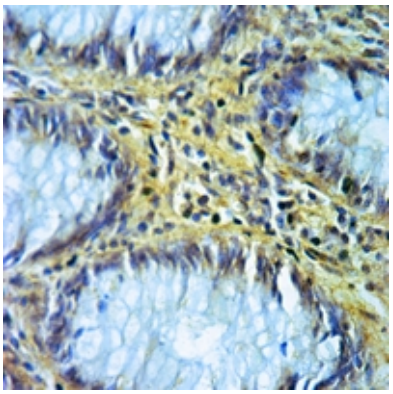
Name	ALDH1B1 (HGNC:407)
Function	Broad specificity, mitochondrial aldehyde dehydrogenase that could play a role in the detoxification of alcohol-derived acetaldehyde and other aldehydes (PubMed:20616185, PubMed:25413692, PubMed:35788181). Shows an absolute preference for NAD(+) as no activity is detected with NADP(+) (PubMed:20616185, PubMed:25413692). Has a high affinity and catalytic efficiency toward aliphatic medium- chain saturated aldehydes relative to short-chain and aromatic aldehydes in vitro (PubMed:20616185). Also capable of metabolizing products of lipid peroxidation, namely 4-hydroxynon-2-enal(4-HNE) and malonaldehyde (MDA) but with lower catalytic efficiency (PubMed:20616185). In vitro, it can also display a nitroglycerin reductase activity (PubMed:25413692). Has also an esterase activity in vitro, but this may be not physiologically relevant in vivo (PubMed:20616185).
Cellular Location	Mitochondrion matrix

Tissue Location	Liver, testis and to a lesser extent in brain.

Images



Western blot analysis of ALDH1B1 expression in HEK293T (A), Hela (B), H446 (C) whole cell lysates. (Predicted band size: 57 kD; Observed band size: 57 kD)



Immunohistochemical analysis of ALDH1B1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.