

Anti-ALDH2 monoclonal antibody, clone 0B21BG21 (DCABH-289)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview Mouse monoclonal to ALDH2 **Antigen Description** This protein belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of aldehyde dehydrogenase, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of Orientals have the cytosolic isozyme but not the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of a catalytically active form of the mitochondrial isozyme. The increased exposure to acetaldehyde in individuals with the catalytically inactive form may also confer greater susceptibility to many types of cancer. This gene encodes a mitochondrial isoform, which has a low Km for acetaldehydes, and is localized in mitochondrial matrix. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Immunogen Tissue, cells or virus corresponding to ALDH2. Rat liver mitochondria. Isotype lgG2a Source/Host Mouse **Species Reactivity** Mouse, Rat, Cow, Human Clone 0B21BG21 Purification This antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation. Conjugate Unconjugated

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Applications	ICC/IF, IP, In-Cell ELISA
Positive Control	HepG2 cells; Human, Rat and Mouse liver and HepG2 cell lysates.
Format	Liquid
Size	100 µg
Buffer	Preservative: 0.02% Sodium azide; Constituent: HBS
Preservative	0.02% Sodium Azide
Storage	Store at +4°C. Do not freeze.

GENE INFORMATION

Gene Name	Aldh2 aldehyde dehydrogenase 2 family (mitochondrial) [Rattus norvegicus]
Official Symbol	ALDH2
Synonyms	ALDH2; aldehyde dehydrogenase 2 family (mitochondrial); aldehyde dehydrogenase, mitochondrial; ALDH1; ALDH-E2; ALDH class 2; mitochondrial aldehyde dehydrogenase; aldehyde dehydrogenase 2, mitochondrial;
Entrez Gene ID	29539
Protein Refseq	<u>NP_115792</u>
UniProt ID	<u>P11884</u>
Pathway	Arginine and proline metabolism, organism-specific biosystem; Arginine and proline metabolism, conserved biosystem; Ascorbate and aldarate metabolism, organism-specific biosystem; Ascorbate and aldarate metabolism, conserved biosystem; Biological oxidations, organism-specific biosystem; Ethanol oxidation, organism-specific biosystem; Fatty Acid Omega Oxidation, organism-specific biosystem;
Function	aldehyde dehydrogenase (NAD) activity; aldehyde dehydrogenase (NAD) activity; identical protein binding; oxidoreductase activity;