

ALDH2 mouse mAb

Catalog No :	YM1366
Reactivity :	Human;Mouse;Rat;Monkey;Hamster
Applications :	WB
Target :	ALDH2
Fields :	>>Glycolysis / Gluconeogenesis;>>Ascorbate and aldarate metabolism;>>Fatty acid degradation;>>Valine, leucine and isoleucine degradation;>>Lysine degradation;>>Arginine and proline metabolism;>>Histidine metabolism;>>Tryptophan metabolism;>>beta-Alanine metabolism;>>Glycerolipid metabolism;>>Pyruvate metabolism;>>Pantothenate and CoA biosynthesis;>>Metabolic pathways;>>Biosynthesis of cofactors;>>Alcoholic liver disease
Gene Name :	aldh2
Human Gene Id :	217
Human Swiss Prot No :	P05091
Mouse Swiss Prot No :	P47738
Immunogen :	Purified recombinant human ALDH2 protein fragments expressed in E.coli
Specificity :	This antibody detects endogenous levels of ALDH2 and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb 1:1000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen. 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 56kD

Cell Pathway : Glycolysis / Gluconeogenesis;Ascorbate and aldarate metabolism;Fatty acid metabolism;Valine; leucine and isoleucine degradation;Lysine degradation;Arginine and proline metabolism;Histidine metabolism;

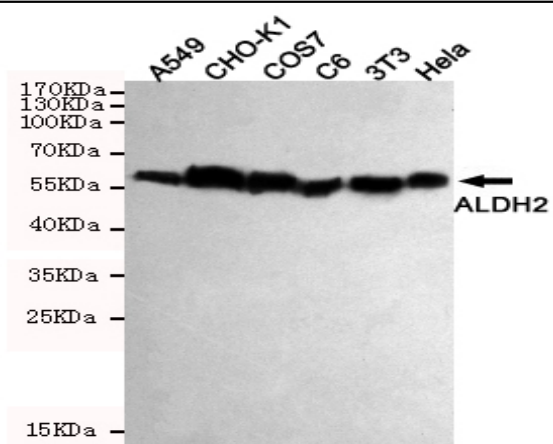
Background : This protein belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of aldehyde dehydrogenase, cytosolic and mitochondrial, can be distinguished by their electrophoretic 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,

Function : catalytic activity:An aldehyde + NAD(+) + H(2)O = an acid + NADH.,disease:Defects in ALDH2 are a cause of acute alcohol sensitivity [MIM:610251]. There are wide individual differences in responses to drinking alcohol. Recent estimates claim that subjective effects (how people feel when they drink) vary from 200%-300% in the adult population, and ethanol metabolism (how quickly alcohol is absorbed into the bloodstream and metabolized by the liver) varies by approximately 200%. Unfortunately, alcohol researchers know very little about why such drastic differences occur between individuals and how individual differences in alcohol sensitivity might link drinking behavior with problematic alcohol-related outcomes.,pathway:Alcohol metabolism; ethanol degradation; acetate from ethanol: step 2/2.,polymorphism:Allele ALDH2*2 is associated with a very high incidence of acute alcohol intoxication

Subcellular Location : Mitochondrion matrix.

Expression : Adipocyte,Brain,Cajal-Retzius cell,Liver,Lymph,Muscle,Small

Products Images



Western blot detection of ALDH2 in HeLa,3T3,C6,COS7,CHO-K1 and A549 cell lysates using ALDH2 mouse mAb (1:1000 diluted).Predicted band size:56kDa.Observed band size:56kDa.