



# ALDH2 Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-02866
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	ALDH2
<b>Protein Name</b>	Aldehyde dehydrogenase mitochondrial
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from the N-terminal region of human ALDH2. AA range:41-90
<b>Specificity</b>	ALDH2 Monoclonal Antibody detects endogenous levels of ALDH2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	ALDH2; ALDM; Aldehyde dehydrogenase, mitochondrial; ALDH class 2; ALDH-E2; ALDH1
<b>Observed Band</b>	56kD
<b>Cell Pathway</b>	Mitochondrion matrix.
<b>Tissue Specificity</b>	Adipocyte,Brain,Cajal-Retzius cell,Liver,Lymph,Muscle,Small
<b>Function</b>	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



## 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,

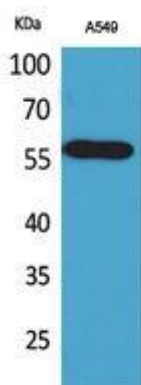
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using ALDH2 Monoclonal Antibody