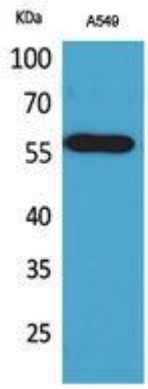
ALDH2 Monoclonal Antibody

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