

ALDH2 Polyclonal Antibody

Catalog No :	YT5355
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
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
Protein Name :	Aldehyde dehydrogenase mitochondrial
Human Gene Id :	217
Human Swiss Prot No :	P05091
Mouse Gene Id :	11669
Mouse Swiss Prot No :	P47738
Rat Gene Id :	29539
Rat Swiss Prot No :	P11884
Immunogen :	The antiserum was produced against synthesized peptide derived from the N-terminal region of human ALDH2. AA range:41-90
Specificity :	ALDH2 Polyclonal Antibody detects endogenous levels of ALDH2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:20000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	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 :	<p>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,</p>
Function :	<p>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</p>
Subcellular Location :	Mitochondrion matrix.
Expression :	Adipocyte,Brain,Cajal-Retzius cell,Liver,Lymph,Muscle,Small

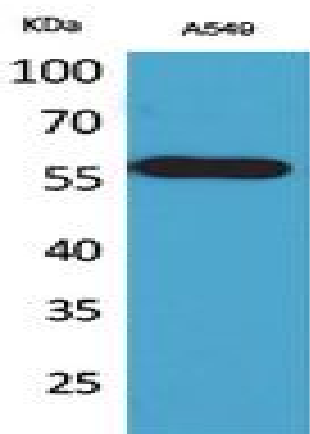
Sort : 1888

No4 : 1

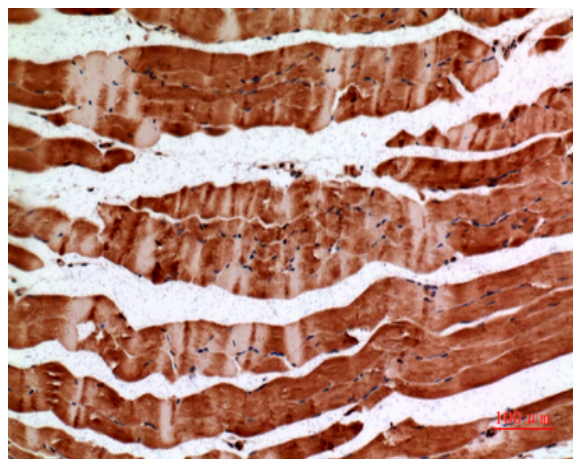
Host : Rabbit

Modifications : Unmodified

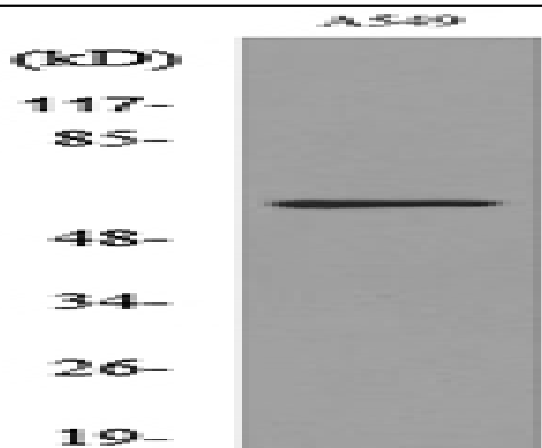
Products Images



Western Blot analysis of A549 cells using ALDH2 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded mouse-muscle, antibody was diluted at 1:100



Western blot analysis of lysate from A549 cells, using ALDH2 Antibody.