
Product Name: ALDH2 Mouse Monoclonal Antibody**Catalog #: AMM83059**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,ELISA,FC
Reactivity	Human,Mouse,Rat,Monkey,Rabbit
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:500,ICC 1:50-1:500,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	56.3kDa

Antigen Information

Gene Name	ALDH2
Alternative Names	ALDM; ALDH1; ALDH-E2
Gene ID	217.0
SwissProt ID	P05091
Immunogen	Purified recombinant fragment of human ALDH2 (AA: 317-517) expressed in E. Coli.

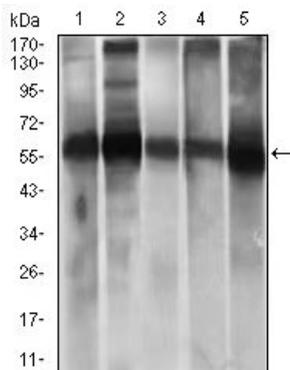
Background

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

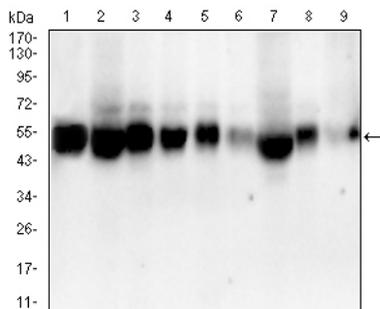
Caucasians have two major isozymes, while approximately 50% of Orientals have the cytosolic isozyme but not the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of a catalytically active form of the 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, which has a low K_m for acetaldehydes, and is localized in mitochondrial matrix. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Research Area

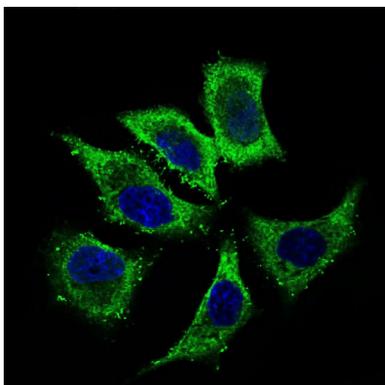
Image Data



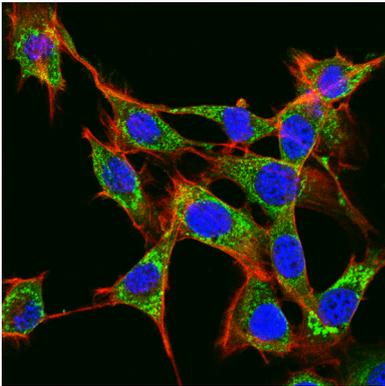
Western blot analysis using ALDH2 mouse mAb against HepG2(1), A549 (2) cell lysate and Rat liver(3), Mouse liver (4), Mouse brain (5) tissue lysate.



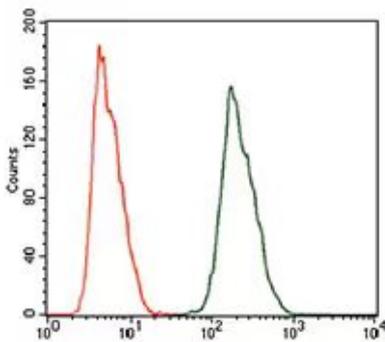
Western blot analysis using ALDH2 mouse mAb against mouse liver(1)Raw264.7(2)NIH/3T3(3)NRK(4)C2C12(5)C6(6)F9(7)COS-7(8)CHO3D10(9)cell lysate.



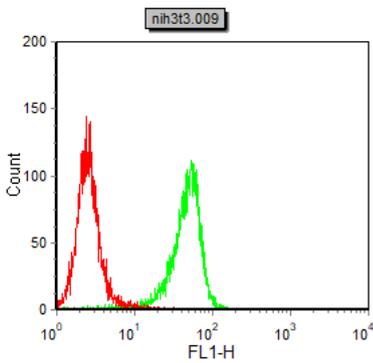
Immunofluorescence analysis of HepG2 cells using ALDH2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



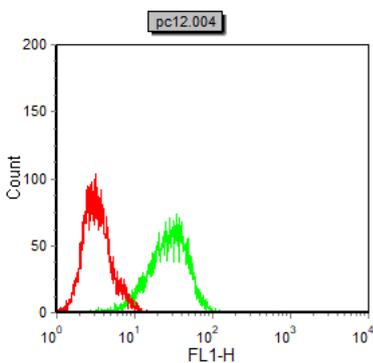
Immunofluorescence analysis of NIH/3T3 cells using ALDH2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



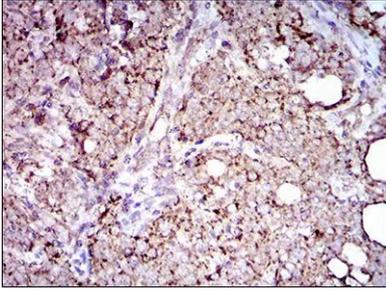
Flow cytometric analysis of HeLa cells using ALDH2 mouse mAb (green) and negative control (purple).



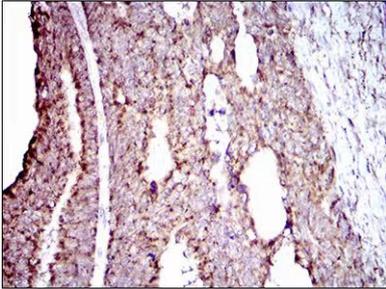
Flow cytometric analysis of NIH/3T3 cells using ALDH2 mouse mAb (green) and negative control (red).



Flow cytometric analysis of PC-12 cells using ALDH2 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ALDH2 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ALDH2 mouse mAb with DAB staining.