

# ALDH2 Rabbit pAb

Catalog No.: A1226 **4 Publications**

## Basic Information

**Observed MW**

50-56kDa

**Calculated MW**

56kDa

**Category**

Primary antibody

**Applications**

ELISA, WB, IHC-P, IF/ICC

**Cross-Reactivity**

Human, Mouse, Rat

## 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 East Asians have the cytosolic isozyme but not the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among East Asians 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.

## Recommended Dilutions

<b>WB</b>	1:500 - 1:1000
<b>IHC-P</b>	1:50 - 1:200
<b>IF/ICC</b>	1:50 - 1:200

## Immunogen Information

**Gene ID**

217

**Swiss Prot**

P05091

**Immunogen**

Recombinant fusion protein containing a sequence corresponding to amino acids 321-480 of human ALDH2 (NP\_000681.2).

**Synonyms**

ALDM; ALDH1; ALDH-E2; ALDH2

## Contact

 | [www.abclonal.com](http://www.abclonal.com)

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

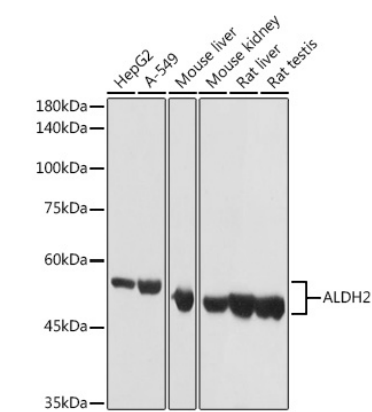
Affinity purification

**Storage**

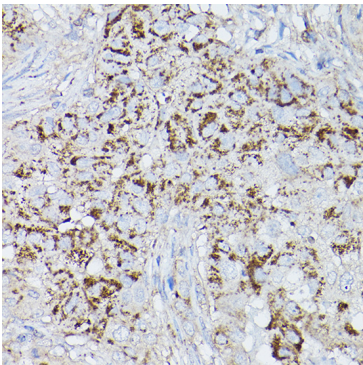
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300, 50% glycerol, pH7.3.

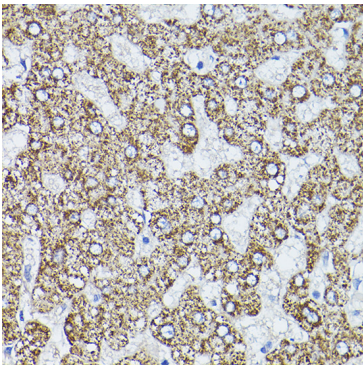
Validation Data



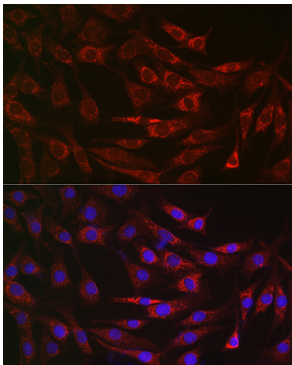
Western blot analysis of extracts of various cell lines, using ALDH2 antibody (A1226) at 1:1000 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (A5014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 1s.



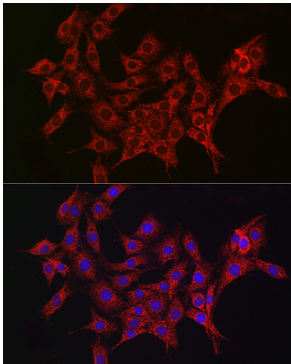
Immunohistochemistry analysis of paraffin-embedded human breast cancer using ALDH2 Rabbit pAb (A1226) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



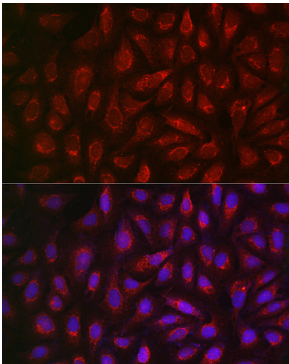
Immunohistochemistry analysis of paraffin-embedded human liver using ALDH2 Rabbit pAb (A1226) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunofluorescence analysis of NIH/3T3 cells using ALDH2 Rabbit pAb (A1226) at dilution of 1:200 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using ALDH2 Rabbit pAb (A1226) at dilution of 1:200 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U2OS cells using ALDH2 Rabbit pAb (A1226) at dilution of 1:200 (40x lens). Blue: DAPI for nuclear staining.