

## **ALDH2 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1432c

# **Specification**

## **ALDH2 Antibody (Center) - Product Information**

Application WB, IHC-P,E Primary Accession P05091

Other Accession P11884, P47738

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
S6381
318-347

# **ALDH2 Antibody (Center) - Additional Information**

#### Gene ID 217

#### **Other Names**

Aldehyde dehydrogenase, mitochondrial, ALDH class 2, ALDH-E2, ALDHI, ALDH2, ALDM

#### Target/Specificity

This ALDH2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 318-347 amino acids from the Central region of human ALDH2.

### **Dilution**

WB~~1:2000 IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

ALDH2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **ALDH2 Antibody (Center) - Protein Information**

## Name ALDH2





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# **Synonyms ALDM**

Function Required for clearance of cellular formaldehyde, a cytotoxic and carcinogenic metabolite that induces DNA damage.

#### **Cellular Location**

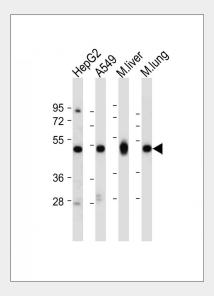
Mitochondrion matrix.

## **ALDH2 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

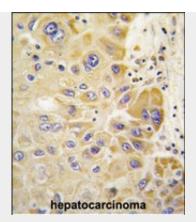
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **ALDH2 Antibody (Center) - Images**



All lanes: Anti-ALDH2 Antibody (Center) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: A549 whole cell lysate Lane 3: Mouse liver tissue lysate Lane 4: Mouse lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with ALDH2 antibody (Center) (Cat.#AP1432c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

# ALDH2 Antibody (Center) - Background

ALDH2 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 this enzyme, 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 Asians have only the cytosolic isozyme, missing the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Asians than among Caucasians could be related to the absence of the mitochondrial isozyme.

# **ALDH2 Antibody (Center) - References**

Guo,Y.M., World J. Gastroenterol. 14 (9), 1444-1449 (2008) Chen,L., PLoS Med. 5 (3), E52 (2008) Teeguarden,J.G., Inhal Toxicol 20 (4), 375-390 (2008) Yoshida,A., Pharmacogenetics 2 (4), 139-147 (1992)