

For Research Use Only

# ALDH2 Polyclonal antibody

Catalog Number: 15310-1-AP

Featured Product

58 Publications



## Basic Information

### Catalog Number:

15310-1-AP

### Concentration:

650 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7452

### GenBank Accession Number:

BC002967

### GeneID (NCBI):

217

### UNIPROT ID:

P05091

### Full Name:

aldehyde dehydrogenase 2 family  
(mitochondrial)

### Calculated MW:

56 kDa

### Observed MW:

50-55 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total  
protein lysate

IHC 1:50-1:500

IF/ICC 1:500-1:1000

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, zebrafish

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

### Positive Controls:

**WB** : K-562 cells, HEK-293 cells, HepG2 cells, HuH-7  
cells, mouse kidney tissue, mouse liver tissue, mouse  
testis tissue, rat kidney tissue, rat liver tissue, rat testis  
tissue

**IP** : HepG2 cells,

**IHC** : human liver tissue,

**IF/ICC** : A549 cells,

## Background Information

Acetaldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. It mediates NADP<sup>+</sup>-dependent oxidation of aldehydes into acids during detoxification of alcohol-derived acetaldehyde; lipid peroxidation; and metabolism of corticosteroids, biogenic amines and neurotransmitters. Genetic variation in ALDH2 is responsible for individual differences in responses to drinking alcohol. Thus, the absence of this enzyme is linked to alcohol intolerance and a reduced risk for alcoholism-related liver disease.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yusuke Amanuma	26374466	Sci Rep	WB
Xiaojuan Chao	34486131	Alcohol Clin Exp Res	WB
Shanshan Zhong	30375985	J Clin Invest	WB,IP,IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

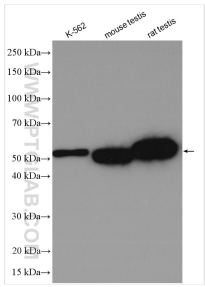
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

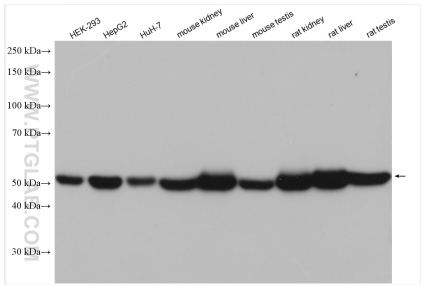
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

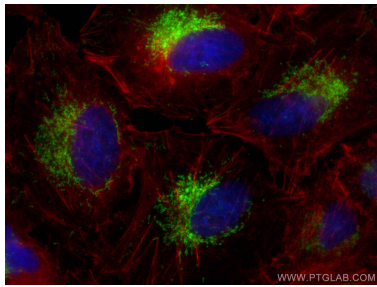
Selected Validation Data



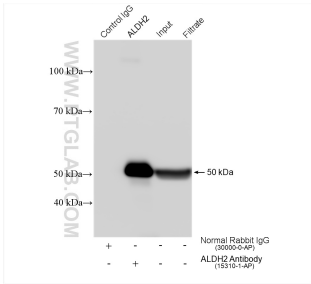
Various lysates were subjected to SDS PAGE followed by western blot with 15310-1-AP (ALDH2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



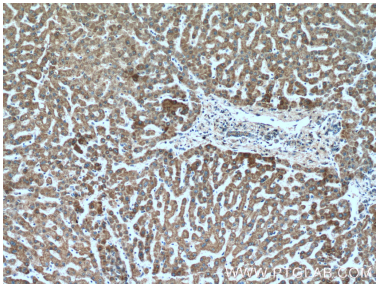
Various lysates were subjected to SDS PAGE followed by western blot with 15310-1-AP (ALDH2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



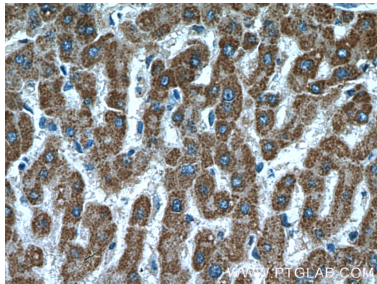
Immunofluorescent analysis of (4% PFA) fixed A549 cells using ALDH2 antibody (15310-1-AP) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



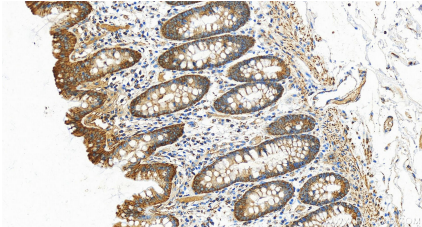
IP result of anti-ALDH2 (IP:15310-1-AP, 4ug; Detection:15310-1-AP 1:8000) with HepG2 cells lysate 2040 ug.



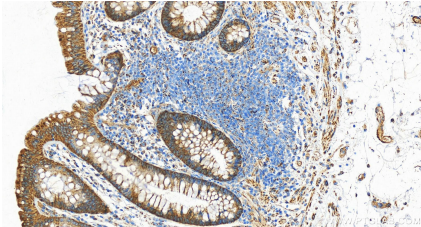
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 15310-1-AP (ALDH2 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 15310-1-AP (ALDH2 Antibody) at dilution of 1:200 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded human normal colon slide using 15310-1-AP (ALDH2 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human normal colon slide using 15310-1-AP (ALDH2 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).