

For Research Use Only

ALDH2 Polyclonal antibody

Catalog Number: 15310-1-AP

Featured Product

60 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⁺-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:

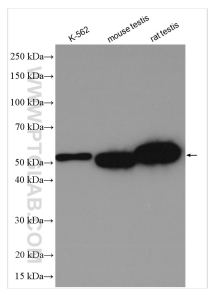
T: 4006900926

E: Proteintech-CN@ptglab.com

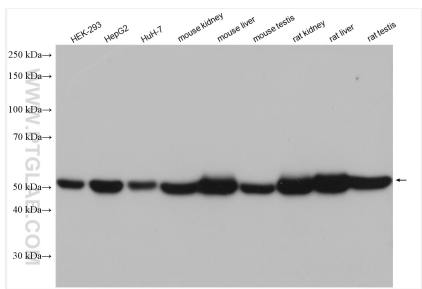
W: ptgcn.com

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

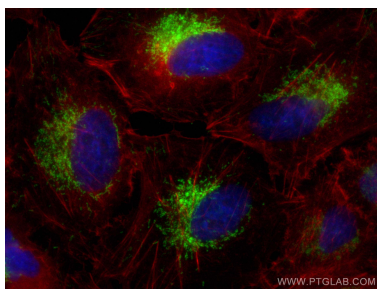
Selected Validation Data



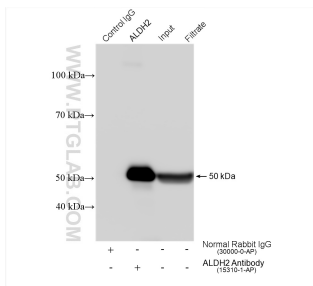
Various lysates were subjected to SDS PAGE followed by western blot with 15310-1-AP (ALDH2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



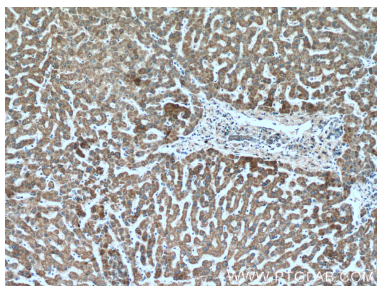
Various lysates were subjected to SDS PAGE followed by western blot with 15310-1-AP (ALDH2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



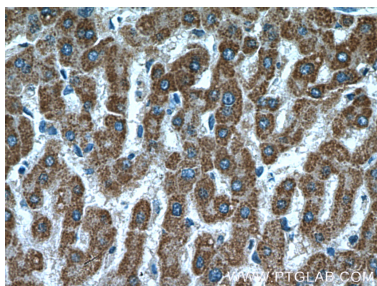
Immunofluorescent analysis of (4% PFA) fixed A549 cells using ALDH2 antibody (15310-1-AP) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



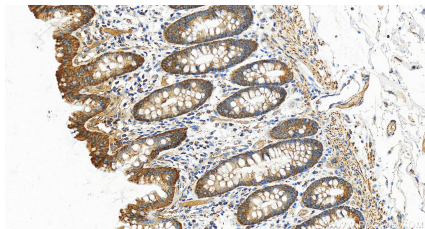
IP result of anti-ALDH2 (IP:15310-1-AP, 4ug; Detection:15310-1-AP 1:8000) with HepG2 cells lysate 2040 ug.



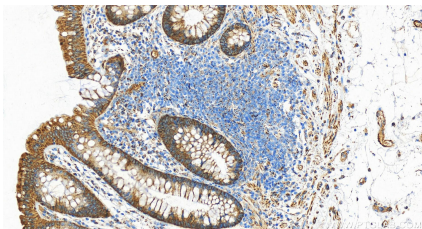
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 15310-1-AP (ALDH2 Antibody) at dilution of 1:200 (under 10x lens).



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).