

For Research Use Only

# ALDH4A1 Polyclonal antibody

Catalog Number: 11604-1-AP

Featured Product

5 Publications



## Basic Information

### Catalog Number:

11604-1-AP

### Size:

500 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG2147

### GenBank Accession Number:

BC023600

### GeneID (NCBI):

8659

### UNIPROT ID:

P30038

### Full Name:

aldehyde dehydrogenase 4 family, member A1

### Calculated MW:

563 aa, 62 kDa

### Observed MW:

62 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2400

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

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IP, IHC, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

**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**: human heart tissue, HepG2 cells, human brain tissue, human liver tissue, human skeletal muscle tissue, K-562 cells, mouse skeletal muscle tissue, mouse small intestine tissue, rat heart tissue

**IP**: mouse skeletal muscle tissue,

**IHC**: human liver cancer tissue, human liver tissue, human prostate cancer tissue

## Background Information

ALDH4A1 (Aldehyde dehydrogenase family 4 member A1) is also named as ALDH4, P5CDH, P5C dehydrogenase and belongs to the aldehyde dehydrogenase family. P5CDH is a mitochondrial matrix NAD(+) dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Defects in ALDH4A1 are the cause of hyperprolinemia type 2 (HP-2).

## Notable Publications

Author	Pubmed ID	Journal	Application
Chaoqun Liu	34551797	J Exp Clin Cancer Res	WB, IHC
Bobby Jones	33446840	Sci Rep	WB
Evelyn Pardo	39554169	bioRxiv	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

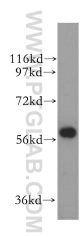
T: 4006900926

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

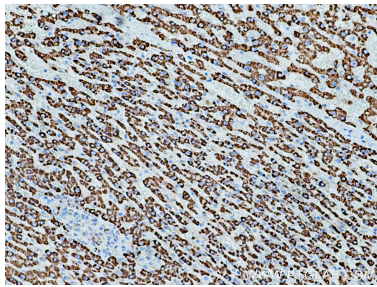
W: [ptgcn.com](http://ptgcn.com)

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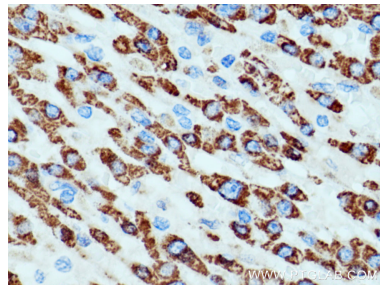
Selected Validation Data



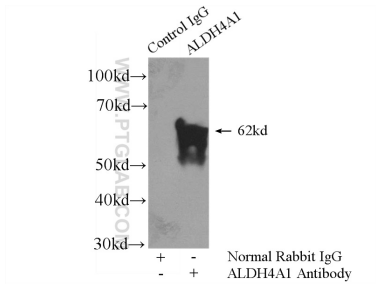
human heart tissue were subjected to SDS PAGE followed by western blot with 11604-1-AP (ALDH4A1 antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 11604-1-AP (ALDH4A1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 11604-1-AP (ALDH4A1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-ALDH4A1 (IP:11604-1-AP, 4ug; Detection:11604-1-AP 1:800) with mouse skeletal muscle tissue lysate 3600ug.