

For Research Use Only

ALDH4A1 Polyclonal antibody

Catalog Number: 11604-1-AP

Featured Product

4 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:

IHC, IP, WB, 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
Samantha J Linder	37957387	Nat Metab	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:

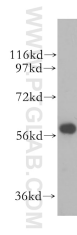
T: 4006900926

E: Proteintech-CN@ptglab.com

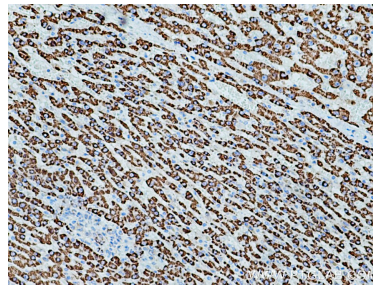
W: ptgcn.com

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

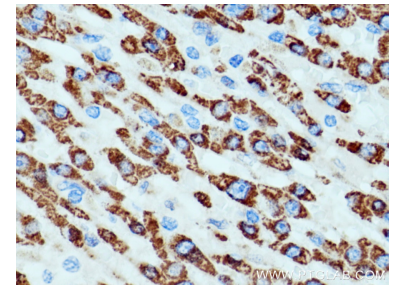
Selected Validation Data



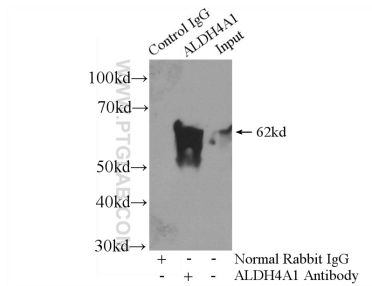
human heart tissue were subjected to SDS PAGE followed by western blot with 11604-1-AP (ALDH4A1 antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



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.