

For Research Use Only

ALDH4A1 Polyclonal antibody

Catalog Number: 11604-1-AP

Featured Product

4 Publications



Basic Information

Catalog Number: 11604-1-AP	GenBank Accession Number: BC023600	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 500 µg/ml by Nanodrop and 307 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 8659	Recommended Dilutions: WB 1:500-1:2400 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:50-1:500
Source: Rabbit	Full Name: aldehyde dehydrogenase 4 family, member A1	
Isotype: IgG	Calculated MW: 563 aa, 62 kDa	
Immunogen Catalog Number: AG2147	Observed MW: 62 kDa	

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

IHC, WB

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

*** 20ul sizes contain 0.1% BSA

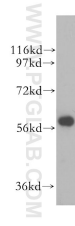
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

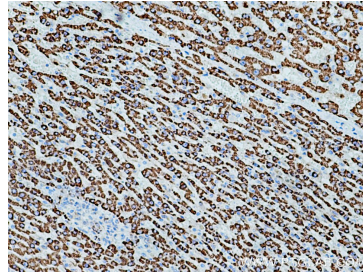
E: proteintech@ptglab.com
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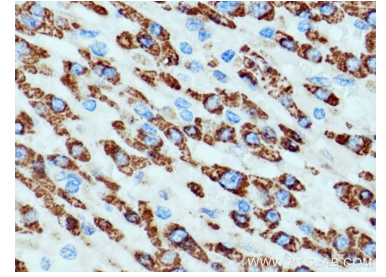
Selected Validation Data



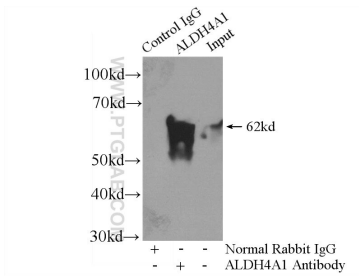
human heart tissue were subjected to SDS PAGE followed by western blot with 11604-1-AP (ALDH4A1 antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



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.