

For Research Use Only

ALDH1B1 Polyclonal antibody

Catalog Number: 22220-1-AP

2 Publications



Basic Information

Catalog Number:

22220-1-AP

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop and 580 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG17557

GenBank Accession Number:

BC001619

GeneID (NCBI):

219

UNIPROT ID:

P30837

Full Name:

aldehyde dehydrogenase 1 family, member B1

Calculated MW:

517 aa, 57 kDa

Observed MW:

55-58 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:2000

IHC: 1:500-1:2000

IF/ICC: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, rat

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: HeLa cells, HepG2 cells, mouse brain tissue, mouse testis tissue, rat brain tissue

IHC: human ovary tumor tissue, human colon cancer tissue, human liver tissue, rat kidney tissue

IF/ICC: HepG2 cells, MCF-7 cells

Background Information

Aldehyde dehydrogenases (ALDHs) belong to a superfamily of NAD(P)⁺-dependent enzymes, which catalyze the oxidation of endogenous and exogenous aldehydes to their corresponding acids. ALDH1B1 is a mitochondrial ALDH that it is dramatically upregulated in human colonic adenocarcinoma, making it a potential biomarker for human colon cancer.(PMID:21216231). ALDH1B1 is a homotetramer expressed in various adult and fetal human tissues including liver, testis, kidney, skeletal muscle, heart, placenta, brain and lung(PMID:18611112). This antibody is specific to ALDH1B1.

Notable Publications

Author	Pubmed ID	Journal	Application
Hao-Long Zeng	29254222	Oncotarget	WB
Tao Zhu	35281423	Transl Cancer Res	IHC

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

*** 20ul sizes contain 0.1% BSA

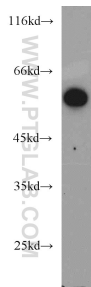
For technical support and original validation data for this product please contact:

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

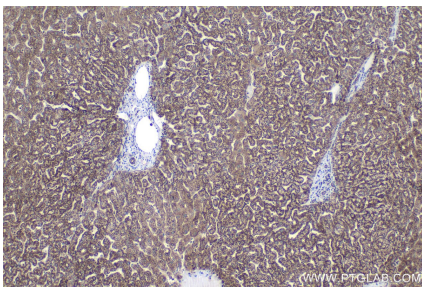
E: proteintech@ptglab.com
W: ptglab.com

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

Selected Validation Data



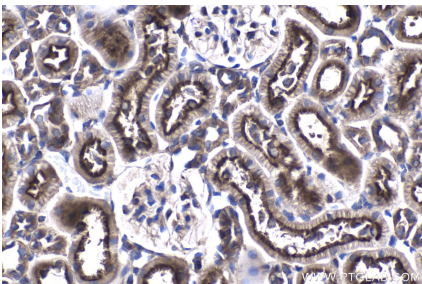
HeLa cells were subjected to SDS PAGE followed by western blot with 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



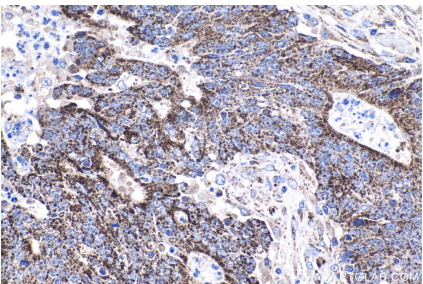
Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



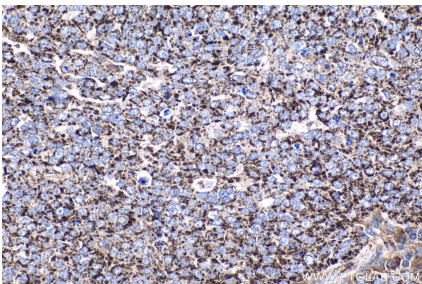
Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



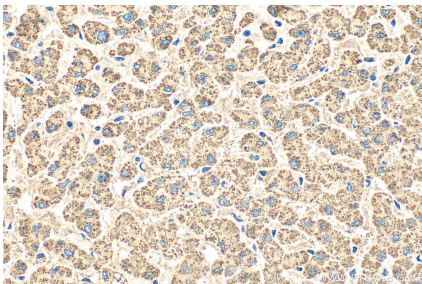
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



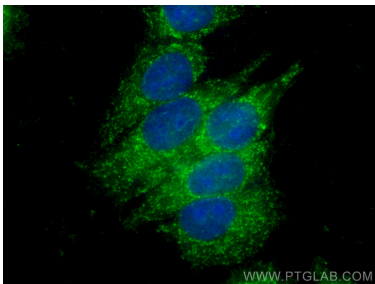
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



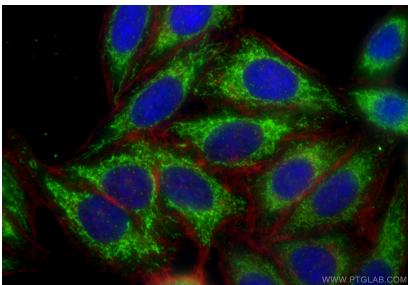
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 22220-1-AP (ALDH1B1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using ALDH1B1 antibody (22220-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (-20°C Ethanol)
fixed HepG2 cells using ALDH1B1 antibody (22220-
1-AP) at dilution of 1:400 and CoraLite®488-
Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2),
CL594-phalloidin (red).