

For Research Use Only

ALDH1L2 Polyclonal antibody

Catalog Number: 21391-1-AP

Featured Product

12 Publications



Basic Information

Catalog Number:

21391-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG16046

GenBank Accession Number:

BC103935

GeneID (NCBI):

160428

UNIPROT ID:

Q3SY69

Full Name:

aldehyde dehydrogenase 1 family, member L2

Calculated MW:

923 aa, 102 kDa

Observed MW:

102 kDa, 89 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:3000

IHC 1:20-1:200

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, pig

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 : mouse pancreas tissue, rat pancreas tissue

IHC : human pancreas tissue, human heart tissue

IF/ICC : A431 cells,

Background Information

ALDH1L2 (Aldehyde dehydrogenase family 1 member L2) is also named as mitochondrial 10-FTHFDH, mtFDH and belongs to the aldehyde dehydrogenase family and ALDH1L subfamily. The ALDH1L2 gene has three transcriptional variants with the molecular weight of 102 kDa, 42 kDa and 89 kDa (PMID:19823103). It is a mitochondrial enzyme, a likely source of CO₂ production from 10-formyltetrahydrofolate in mitochondria and playing an essential role in the distribution of one-carbon groups between the cytosolic and mitochondrial compartments of the cell (PMID:20498374). It also has dehydrogenase/hydrolase activities similar to cytosolic FDH (ALDH1L1). The native ALDH1L2 has been reported to exist as a dimer or tetramer (PMID:7822273).

Notable Publications

Author	Pubmed ID	Journal	Application
Alessandra Fiore	35245456	Mol Cell	WB
Eduardo Balsa	32483148	Nat Commun	WB
Yang Zhang	35857842	Sci Adv	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

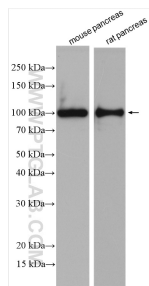
For technical support and original validation data for this product please contact:

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

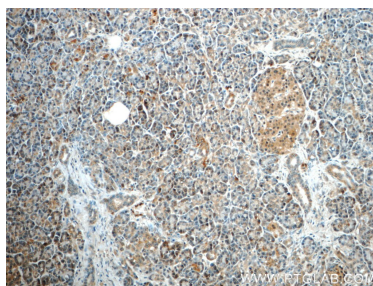
E: proteintech@ptglab.com
W: ptglab.com

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

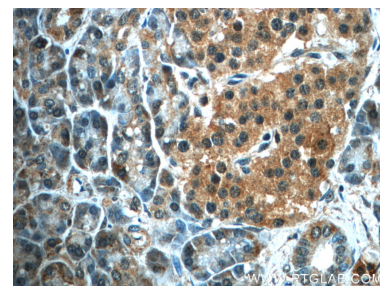
Selected Validation Data



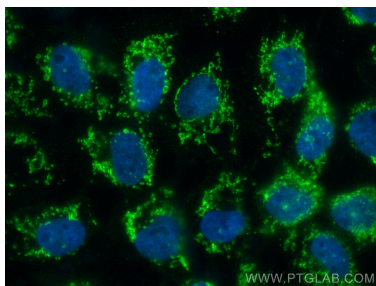
Various lysates were subjected to SDS PAGE followed by western blot with 21391-1-AP (ALDH1L2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



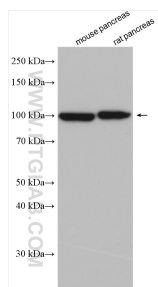
Immunohistochemical analysis of paraffin-embedded human pancreas slide using 21391-1-AP (ALDH1L2 Antibody) at dilution of 1:50.



Immunohistochemical analysis of paraffin-embedded human pancreas slide using 21391-1-AP (ALDH1L2 Antibody) at dilution of 1:50.



Immunofluorescent analysis of (4% PFA) fixed A431 cells using ALDH1L2 antibody (21391-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 21391-1-AP (ALDH1L2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.