### For Research Use Only

# ALDH1L2 Polyclonal antibody

Catalog Number:21391-1-AP

8 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

ze: GeneID (NCBI):

150ul , Concentration: 600 µg/ml by 160428 Nanodrop; Full Name:

Source: aldehyde dehydrogenase 1 family,

BC103935

Rabbit member L2

Isotype: Calculated MW:
IgG 923 aa, 102 kDa
Immunogen Catalog Number: Observed MW:
AG16046 102 kDa, 89 kDa

Antigen affinity purification Recommended Dilutions:

**Purification Method:** 

WB 1:500-1:3000 IHC 1:20-1:200 IF 1:200-1:800

**Applications** 

Tested Applications: IF, IHC, WB, ELISA

Cited Applications: IHC, WB

21391-1-AP

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: 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.

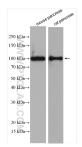
Storage Buffer:

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

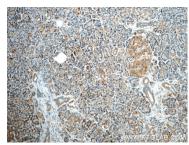
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

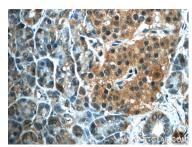
## **Selected Validation Data**



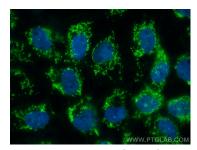
Various lysates were subjected to SDS PAGE followed by western blot with 21391-1-AP (ALDH1L2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



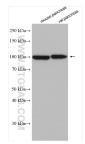
Immunohistochemical analysis of paraffinembedded human pancreas slide using 21391-1-AP (ALDH1L2 Antibody) at dilution of 1:50.



Immunohistochemical analysis of paraffinembedded 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 AffiniPure 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.