

For Research Use Only

PRODH Polyclonal antibody

Catalog Number: 22980-1-AP

Featured Product

12 Publications



Basic Information

Catalog Number: 22980-1-AP	GenBank Accession Number: BC118597	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 600 µg/ml by Nanodrop and 347 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5625	Recommended Dilutions: WB 1:2000-1:10000 IHC 1:20-1:200
Source: Rabbit	Full Name: proline dehydrogenase (oxidase) 1	
Isotype: IgG	Calculated MW: 600 aa, 68 kDa	
Immunogen Catalog Number: AG18429	Observed MW: 56 kDa, 66 kDa	

Applications

Tested Applications:

IHC, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, 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: mouse liver tissue, A549 cells, rat liver tissue

IHC: human cerebellum tissue, human liver cancer tissue, human breast cancer tissue, human skeletal muscle tissue

Background Information

PRODH (Proline dehydrogenase 1, mitochondrial) is also named as PIG6, HSPOX2, PRODH1, PRODH2, POX, SCZD4, TP5316 and belongs to the proline oxidase family. It is an oxidoreductase involved in the transfer of redox potential across the mitochondrial membrane and catalyzes the rate-limiting oxidation of proline to pyrroline-5-carboxylate (P5C). High PRODH activity is sufficient to induce mitochondria-mediated apoptosis in the presence of proline. Defects in PRODH are the cause of hyperprolinemia type 1 (HP-1) and defects in PRODH are associated with susceptibility to schizophrenia type 4 (SCZD4). This protein has 3 isoforms produced by alternative splicing with the molecular mass of 68 kDa, 59 kDa and 56 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Weijing Zhang	36230367	Animals (Basel)	WB,IF
Chengwen Feng	32883027	Animals (Basel)	WB,IF
Jiacheng Wang	33294127	Oxid Med Cell Longev	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

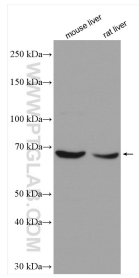
For technical support and original validation data for this product please contact:

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

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

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

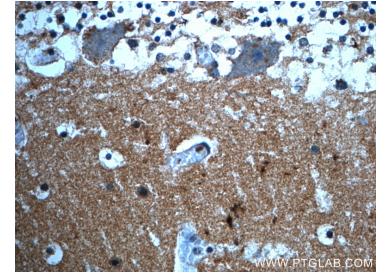
Selected Validation Data



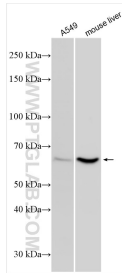
Various lysates were subjected to SDS PAGE followed by western blot with 22980-1-AP (PRODH antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human cerebellum slide using 22980-1-AP (PRODH Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human cerebellum slide using 22980-1-AP (PRODH Antibody) at dilution of 1:50 (under 40x lens).



Various lysates were subjected to SDS PAGE followed by western blot with 22980-1-AP (PRODH antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.