10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PRODH Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8620c

Specification

PRODH Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q9WU79
Other Accession	O43272
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**130-155**

PRODH Antibody (Center) - Additional Information

Gene ID 19125

Other Names
Proline dehydrogenase 1, mitochondrial, Proline oxidase, Prodh, Pro1

Target/Specificity
This PRODH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 130-155 amino acids from the Central region of human PRODH.

Dilution
WB~~1:2000
IHC-P~~1:25
FC~~1:25

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PRODH Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PRODH Antibody (Center) - Protein Information

Name Prodh

Synonyms Pro1

Function Converts proline to delta-1-pyrroline-5-carboxylate.

Cellular Location
Mitochondrion matrix.

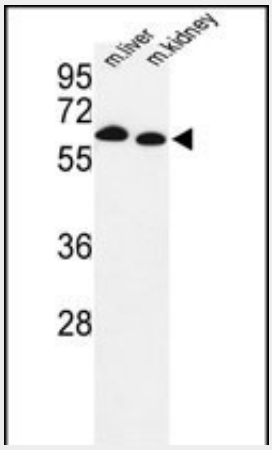
Tissue Location
Expressed in liver, kidney, heart and to a lesser extent in brain, lung and muscle

PRODH Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

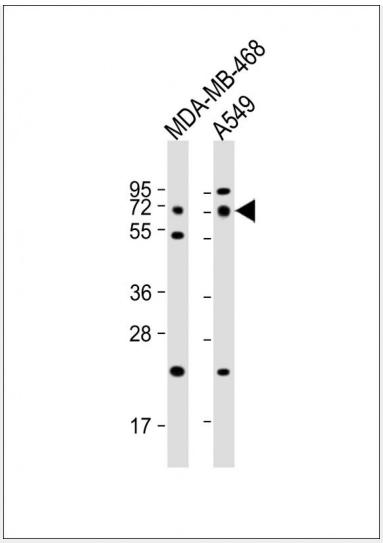
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PRODH Antibody (Center) - Images

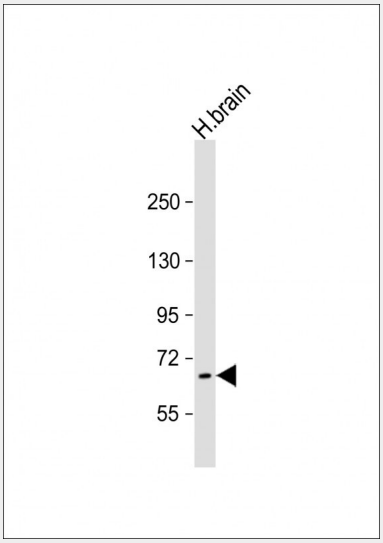


Western blot analysis of mouse Prodh Antibody (Center) (Cat. #AP8620c) in mouse liver, kidney tissue lysates (35ug/lane). PRODH (arrow) was detected using the purified Pab.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

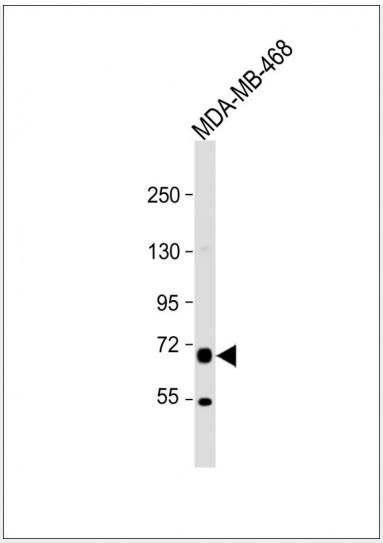


All lanes : Anti-PRODH Antibody (Center) at 1:1000 dilution Lane 1: MDA-MB-468 whole cell lysates Lane 2: A549 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

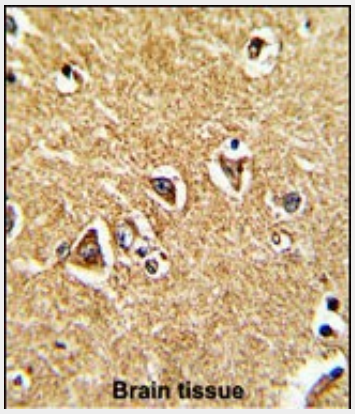


Anti-PRODH Antibody (Center) at 1:2000 dilution + human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

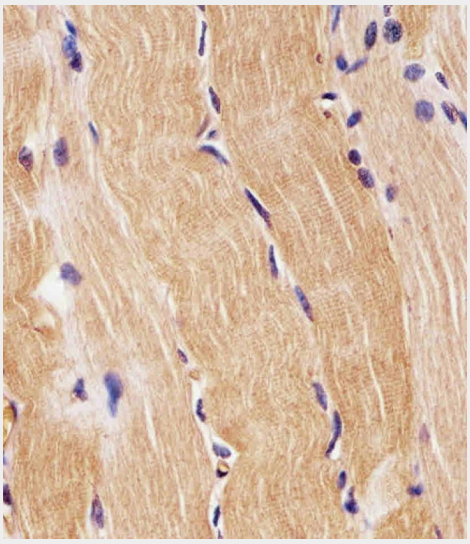
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-PRODH Antibody (Center) at 1:2000 dilution + MDA-MB-468 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

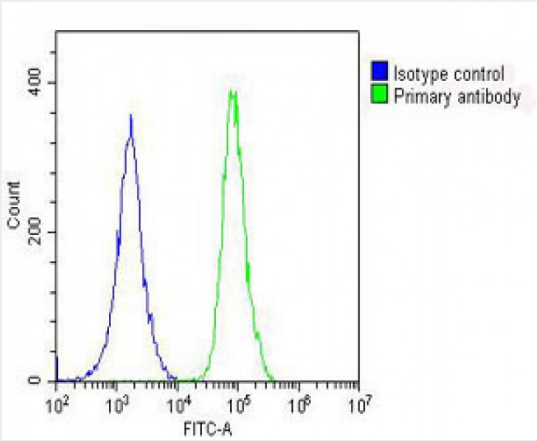


Formalin-fixed and paraffin-embedded human brain tissue reacted with mouse Prodh Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

AP8620c staining PRODH in H. skeletal muscle sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing A549 cells stained with AP8620c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP8620c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

PRODH Antibody (Center) - Background

PRODH is a mitochondrial proline dehydrogenase that catalyzes the first step in proline degradation. It converts proline to delta-1-pyrroline-5-carboxylate.

PRODH Antibody (Center) - References

Polyak,K., et.al., Nature 389 (6648), 300-305 (1997) Gogos,J.A., et.al., Nat. Genet. 21 (4), 434-439 (1999)