

# PRODH Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8620c

## Product Information

---

<b>Application</b>	WB, IHC-P, FC, E
<b>Primary Accession</b>	<a href="#">Q9WU79</a>
<b>Other Accession</b>	<a href="#">O43272</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	68036
<b>Antigen Region</b>	130-155

## Additional Information

---

<b>Gene ID</b>	19125
<b>Other Names</b>	Proline dehydrogenase 1, mitochondrial, Proline oxidase, Prodh, Pro1
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	PRODH Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	Prodh
<b>Synonyms</b>	Pro1
<b>Function</b>	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

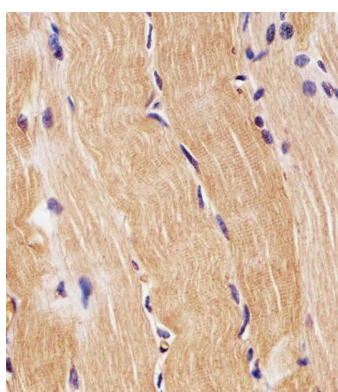
## Background

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

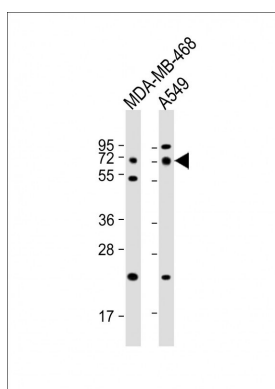
## References

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

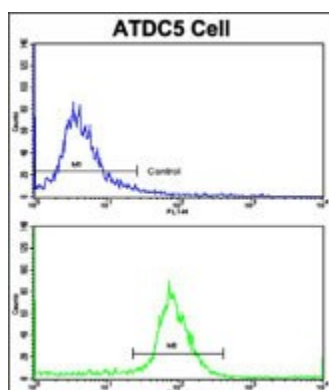
## Images



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 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



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.



Flow cytometric analysis of ATDC5 cells using mouse Prodh Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.