



## Rabbit Anti-PRODH antibody

SL5813R

<b>Product Name:</b>	PRODH
<b>Chinese Name:</b>	脯氨酸脱氢酶抗体
<b>Alias:</b>	HSPOX2; P53 induced gene 6 protein; PIG6; PRODH 1; PRODH 2; PRODH1; PRODH2; Proline dehydrogenase; proline dehydrogenase (oxidase) 1; proline dehydrogenase (proline oxidase); Proline oxidase, mitochondrial precursor; SCZD4; TP53I6; tumor protein p53 inducible protein 6; PROD_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Horse,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	68kDa
<b>Cellular localization:</b>	cytoplasmicMitochondrion
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human PRODH:141-240/600
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Proline oxidase catalyzes the conversion of proline to pyrroline-5-carboxylate, or P5C during the degradation of the amino acid Proline. Defects in PRODH are the cause of hyperprolinemia type 1, a disorder characterized by elevated serum proline levels. Defective PRODH may be involved in the psychiatric and behavioral phenotypes

associated with the 22q11 velocardiofacial and DiGeorge syndrome and may be associated with susceptibility to schizophrenia 4 (SCZD4).

**Function:**

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

**Subcellular Location:**

Mitochondrion matrix.

**Tissue Specificity:**

Expressed in lung, skeletal muscle and brain, to a lesser extent in heart and kidney, and weakly in liver, placenta and pancreas.

**DISEASE:**

Defects in PRODH are the cause of hyperprolinemia type 1 (HP-1) [MIM:239500]. HP-1 is a disorder characterized by elevated serum proline levels. May be involved in the psychiatric and behavioral phenotypes associated with the 22q11 velocardiofacial and DiGeorge syndrome.

Defects in PRODH are associated with susceptibility to schizophrenia type 4 (SCZD4) [MIM:600850]. A complex, multifactorial psychotic disorder or group of disorders characterized by disturbances in the form and content of thought (e.g. delusions, hallucinations), in mood (e.g. inappropriate affect), in sense of self and relationship to the external world (e.g. loss of ego boundaries, withdrawal), and in behavior (e.g. bizarre or apparently purposeless behavior). Although it affects emotions, it is distinguished from mood disorders in which such disturbances are primary. Similarly, there may be mild impairment of cognitive function, and it is distinguished from the dementias in which disturbed cognitive function is considered primary. Some patients manifest schizophrenic as well as bipolar disorder symptoms and are often given the diagnosis of schizoaffective disorder.

**Similarity:**

Belongs to the proline oxidase family.

**SWISS:**

O43272

**Gene ID:**

5625

**Database links:**

[Entrez Gene: 5625](#)Human

[Entrez Gene: 19125](#)Mouse

[Entrez Gene: 680409](#)Rat

[Oimim: 606810](#)Human

[SwissProt: O43272](#)Human

[SwissProt: Q9WU79](#)Mouse

[Unigene: 517352](#)Human

[Unigene: 28456](#)Mouse

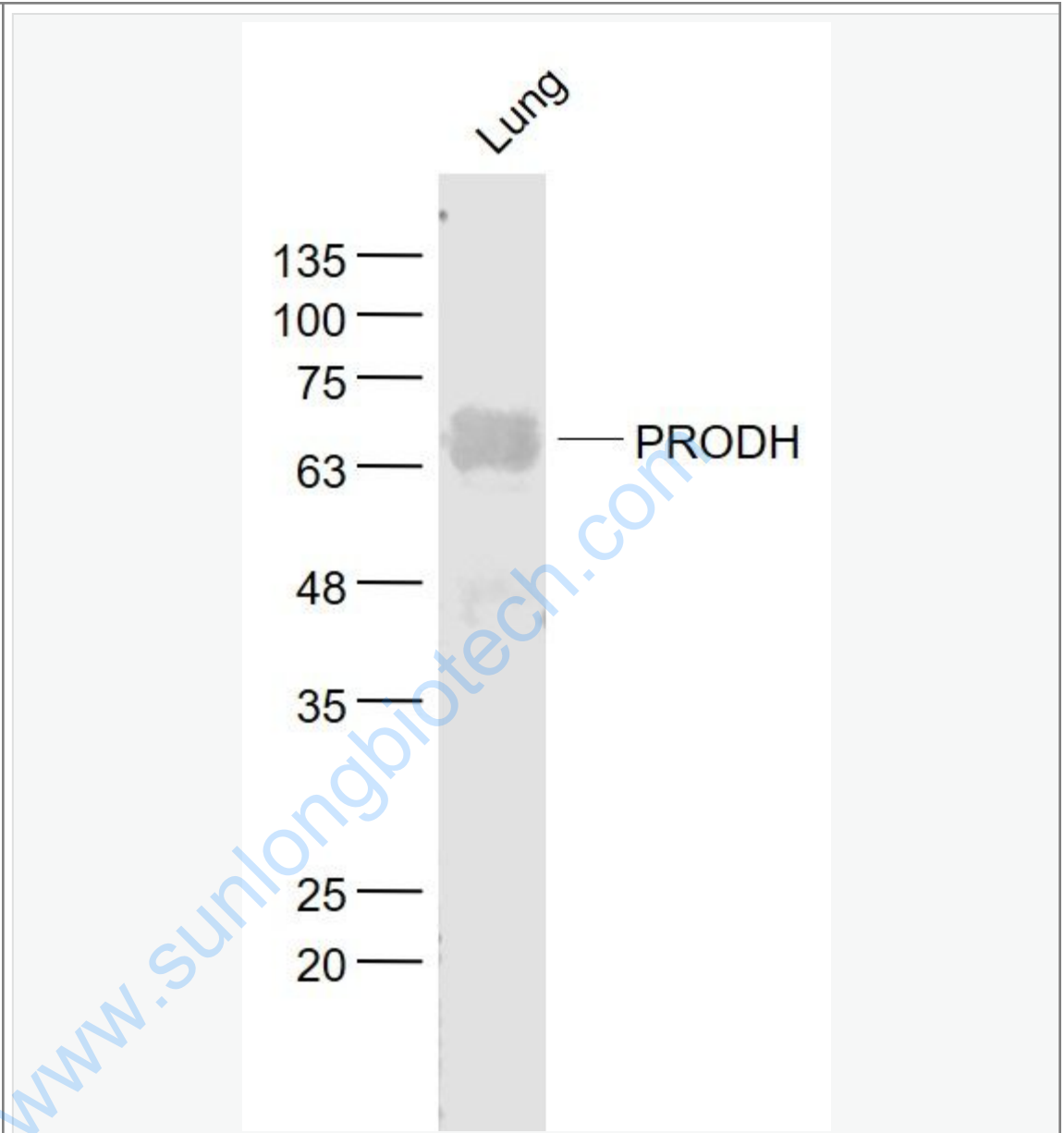
[Unigene: 153570](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Picture:



Sample:

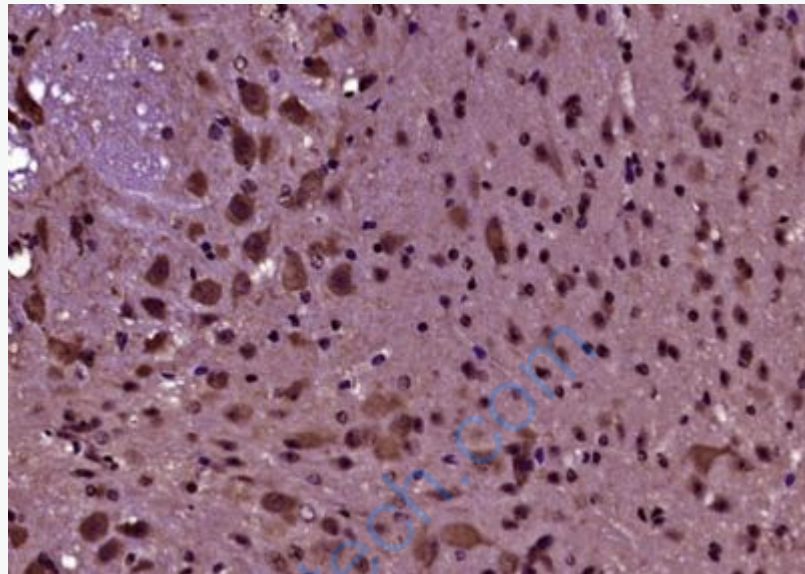
Lung (Mouse) Lysate at 40 ug

Primary: Anti- PRODH (SL5813R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 68 kD

Observed band size: 68 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PRODH) Polyclonal Antibody, Unconjugated (SL5813R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.