

# Rabbit Anti-PYCR1 antibody

# SL20864R

Product Name:	PYCR1
Chinese Name:	P5C还原酶1抗体
Alias:	P5C; P5C reductase 1; P5C reductase; P5CR 1; P5CR; PIG45; PP222; Proliferation inducing protein 45; PYCR 1; PYCR; Pyrroline 5 carboxylate reductase 1; Pyrroline 5 carboxylate reductase 1 mitochondrial.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Mouse,Rat,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	33kDa
Cellular localization:	cytoplasmic Mitochondrion cytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse PYCR1:241-309/309
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes an enzyme that catalyzes the NAD(P)H-dependent conversion of pyrroline-5-carboxylate to proline. This enzyme may also play a physiologic role in the generation of NADP(+) in some cell types. The protein forms a homopolymer and localizes to the mitochondrion. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

#### **Function:**

Housekeeping enzyme that catalyzes the last step in proline biosynthesis. Can utilize both NAD and NADP, but has higher affinity for NAD. Involved in the cellular response to oxidative stress.

#### Subunit:

Homodecamer; composed of 5 homodimers.

#### **Subcellular Location:**

Mitochondrial

#### DISEASE:

The disease is caused by mutations affecting the gene represented in this entry. Disease description: A disorder characterized by an excessive congenital skin wrinkling, a large fontanelle with delayed closure, a typical facial appearance with downslanting palpebral fissures, a general connective tissue weakness, and varying degrees of growth and developmental delay and neurological abnormalities. Patients do not manifest metabolic abnormalities.

#### Similarity:

Belongs to the pyrroline-5-carboxylate reductase family.

### SWISS:

O922W5

#### Gene ID:

209027

#### Database links:

Entrez Gene: 209027Mouse

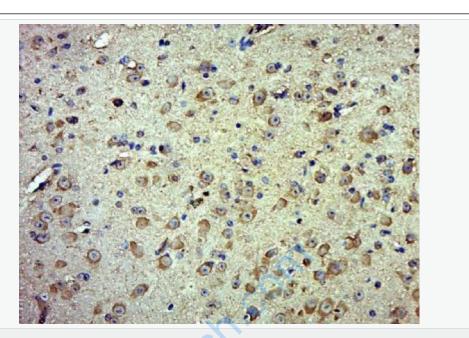
Entrez Gene: 287877Rat

SwissProt: Q922W5Mouse

SwissProt: B2RYR3Rat

#### **Important Note:**

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



## Picture:

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 (PYCR1) Polyclonal Antibody, Unconjugated (SL20864R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.