

**PYCR1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9893b**

**Specification**

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**PYCR1 Antibody (C-term) - Product Information**

Application	<b>WB, IHC-P, FC,E</b>
Primary Accession	<a href="#">P32322</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>291-319</b>

**PYCR1 Antibody (C-term) - Additional Information**

**Gene ID** 5831

**Other Names**

Pyrraline-5-carboxylate reductase 1, mitochondrial, P5C reductase 1, P5CR 1, PYCR1

**Target/Specificity**

This PYCR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 291-319 amino acids from the C-terminal region of human PYCR1.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**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**

PYCR1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PYCR1 Antibody (C-term) - Protein Information**

**Name** PYCR1

**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.

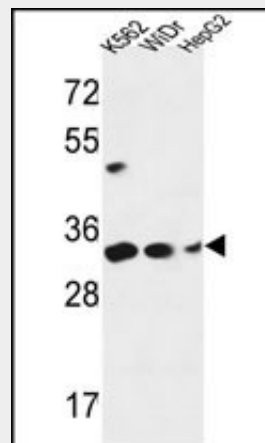
**Cellular Location**  
Mitochondrion.

### **PYCR1 Antibody (C-term) - Protocols**

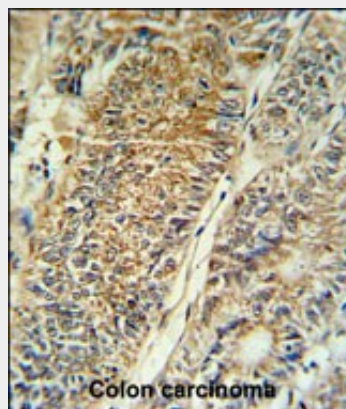
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **PYCR1 Antibody (C-term) - Images**

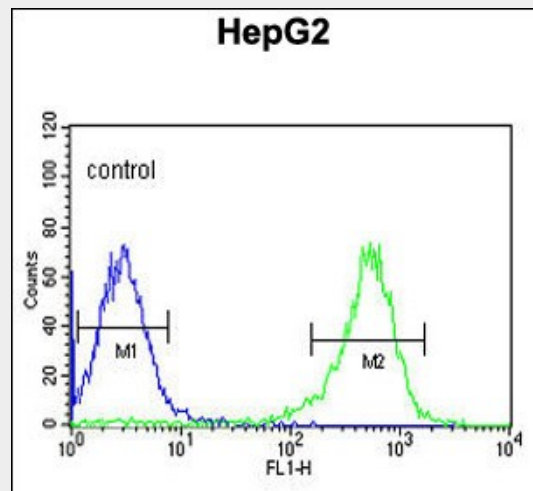


PYCR1 Antibody (C-term) (Cat. #AP9893b) western blot analysis in K562, WiDr, HepG2 cell line lysates (35ug/lane). This demonstrates the PYCR1 antibody detected the PYCR1 protein (arrow).



PYCR1 Antibody (C-term) (Cat. #AP9893b) IHC analysis in formalin fixed and paraffin embedded colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PYCR1 Antibody (C-term) for immunohistochemistry.

Clinical relevance has not been evaluated.



PYCR1 Antibody (C-term) (Cat. #AP9893b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **PYCR1 Antibody (C-term) - Background**

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.

#### **PYCR1 Antibody (C-term) - References**

Reversade, B., et al. Nat. Genet. 41(9):1016-1021(2009)  
Guernsey, D.L., et al. Am. J. Hum. Genet. 85(1):120-129(2009)  
Meng, Z., et al. J. Mol. Biol. 359(5):1364-1377(2006)

#### **PYCR1 Antibody (C-term) - Citations**

- [Pyrroline-5-Carboxylate Reductase 1 Accelerates the Migration and Invasion of Nonsmall Cell Lung Cancer In Vitro.](#)
- [Knockdown of PYCR1 inhibits cell proliferation and colony formation via cell cycle arrest and apoptosis in prostate cancer.](#)