

PYCR1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5535

Specification

PYCR1 Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	P32322
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=33,36 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

PYCR1 Antibody (C-term) - Additional Information

Gene ID 5831

Antigen Region
291-319

Other Names
Pyrroline-5-carboxylate reductase 1, mitochondrial, P5C reductase 1, P5CR 1, PYCR1

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

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.

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 ([HGNC:9721](#))

Function
Oxidoreductase that catalyzes the last step in proline biosynthesis, which corresponds to the

reduction of pyrroline-5- carboxylate to L-proline using NAD(P)H (PubMed:16730026, PubMed:19648921, PubMed:23024808, PubMed:28258219). At physiologic concentrations, has higher specific activity in the presence of NADH (PubMed:16730026, PubMed:23024808). Involved in the cellular response to oxidative stress (PubMed:16730026, PubMed:19648921).

Cellular Location

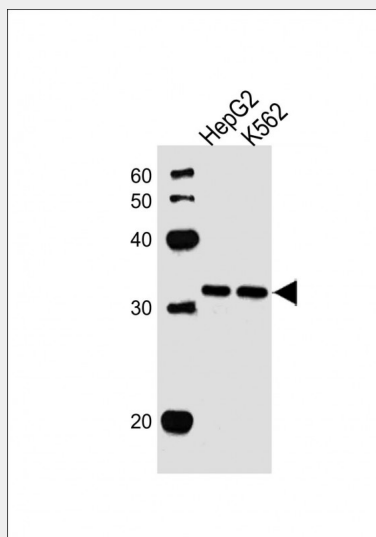
Mitochondrion

PYCR1 Antibody (C-term) - Protocols

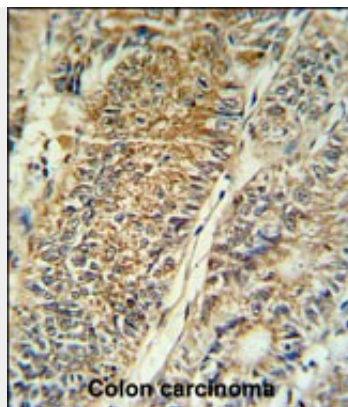
Provided below are standard protocols that you may find useful for product applications.

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

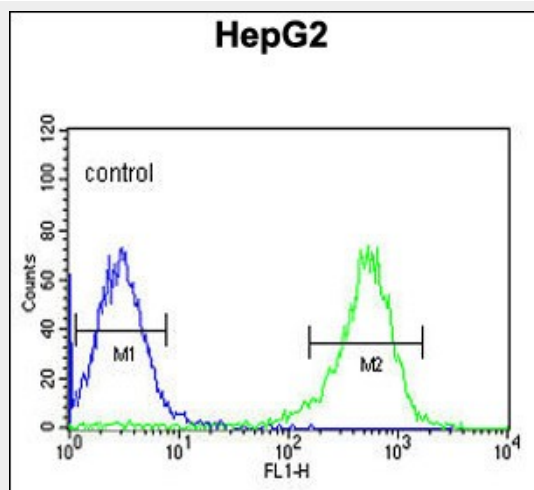
PYCR1 Antibody (C-term) - Images



All lanes : Anti-PYCR1 Antibody (C-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: K562 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 : 33 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



PYCR1 Antibody (C-term) (Cat. #AW5535) 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. #AW5535) 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)