

# PYCR2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP11852c

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">Q96C36</a>
<b>Other Accession</b>	<a href="#">Q6AY23</a> , <a href="#">Q922Q4</a> , <a href="#">Q4R6W7</a> , <a href="#">Q17QJ7</a> , <a href="#">NP_037460.2</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Bovine, Monkey, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB31401
<b>Calculated MW</b>	33637
<b>Antigen Region</b>	89-116

## Additional Information

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<b>Gene ID</b>	29920
<b>Other Names</b>	Pyrroline-5-carboxylate reductase 2, P5C reductase 2, P5CR 2, PYCR2
<b>Target/Specificity</b>	This PYCR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-116 amino acids from the Central region of human PYCR2.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 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>	PYCR2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	PYCR2 ( <a href="#">HGNC:30262</a> )
<b>Function</b>	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: <a href="#">23024808</a> , PubMed: <a href="#">2722838</a> , PubMed: <a href="#">6894153</a> ). At

physiologic concentrations, has higher specific activity in the presence of NADH (PubMed:[23024808](#), PubMed:[2722838](#), PubMed:[6894153](#)). Involved in cellular response to oxidative stress (PubMed:[25865492](#)). In some cell types, such as erythrocytes, its primary function may be the generation of NADP(+) (PubMed:[2722838](#), PubMed:[6894153](#)).

**Cellular Location**

Cytoplasm. Mitochondrion

**Tissue Location**

Detected in erythrocytes (at protein level) (PubMed:[2722838](#), PubMed:[6894153](#)). Expressed in fetal brain (PubMed:[25865492](#)).

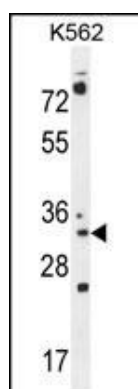
## Background

PYCR2 belongs to the pyrroline-5-carboxylate reductase family. Pyrroline-5-carboxylate reductase catalyzes the the NAD(P)H-dependent conversion of proline to pyrroline-5-carboxylate.

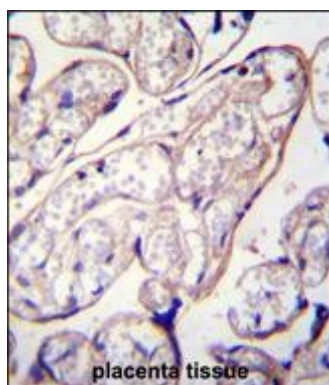
## References

Lamesch, P., et al. Genomics 89(3):307-315(2007)  
Lim, J., et al. Cell 125(4):801-814(2006)  
Colland, F., et al. Genome Res. 14(7):1324-1332(2004)

## Images



PYCR2 Antibody (Center) (Cat. #AP11852c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the PYCR2 antibody detected the PYCR2 protein (arrow).



PYCR2 Antibody (Center) (Cat. #AP11852c) immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PYCR2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.