10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PYCR2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11852c

Specification

PYCR2 Antibody (Center) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q96C36
Other Accession	Q6AY23, Q922Q4, Q4R6W7, Q17QJ7, NP_037460.2
Reactivity	**Human**
Predicted	**Bovine, Monkey, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**33637**
Antigen Region	**89-116**

PYCR2 Antibody (Center) - Additional Information

Gene ID 29920

Other Names
Pyrroline-5-carboxylate reductase 2, P5C reductase 2, P5CR 2, PYCR2

Target/Specificity
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.

Dilution
WB~~1:1000
IHC-P~~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
PYCR2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PYCR2 Antibody (Center) - Protein Information

Name PYCR2 (HGNC:30262)

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:23024808, PubMed:2722838, PubMed:6894153). 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

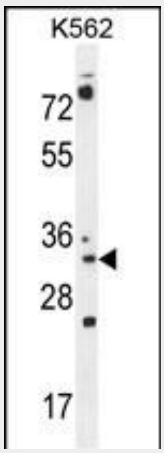
Tissue Location
Detected in erythrocytes (at protein level) (PubMed:2722838, PubMed:6894153). Expressed in fetal brain (PubMed:25865492).

PYCR2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PYCR2 Antibody (Center) - 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).

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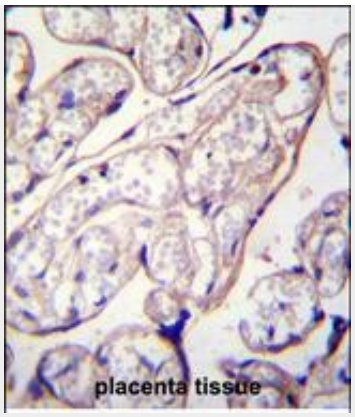

PYCR2 Antibody (Center) (Cat. #AP11852c)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PYCR2 Antibody (Center) for immunohistochemistry. Clinical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

PYCR2 Antibody (Center) - 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.

PYCR2 Antibody (Center) - 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)