

Recombinant Human PYCR2, His-tagged

Cat. No. PYCR2-46H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PYCR2, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
Description	PYCR2 also known as pyrroline-5-carboxylate reductase 2 isoform 1, belongs to the pyrroline-5-carboxylate reductase family. This protein catalyzes the conversion of pyrroline-5-carboxylate to proline, which is the last step in proline biosynthesis. The 3 substrates of this enzyme are L-proline, NAD ⁺ , and NADP ⁺ , whereas its 4 products are 1-pyrroline-5-carboxylate, NADH, NADPH, and H ⁺ .
Form	Liquid. In phosphate buffered saline (pH7.4) containing 50% glycerol, 5mM DTT, 1mM EDTA.
Molecular Mass	36kDa (343aa) confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSMVGFIG AGQLAYALAR GFTAAGILSA HKIIASSPEM NLPTVSALRK MGVNLTRSNK ETVKHSVDLF LAVKPHIIPF ILDEIGADVQ ARHIVVSCAA GVTISSVEKK LMAFQPAPKV IRCMTNTPVV VQEGATVYAT GTHALVEDGQ LLEQLMSSVG FCTEVEEDLI DAVTGLSGSG PAYAFMALDA LADGGVKMGL PRRLAIQLGA QALLGAAKML LDSEQHPCQL KDNVCSPGGA TIHALHFLES GGFRSLINA VEASCIRTRE LQSMADQEKI SPAALKKTLL DRVKLESPTV STLTSPSPGK LLTRSLALGG KKD

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Purity	>90% by SDS - PAGE
Storage	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.
Concentration	0.25mg/ml (determined by Bradford assay)
GENE INFORMATION	
Gene Name	PYCR2 pyrroline-5-carboxylate reductase family, member 2 [Homo sapiens]
Official Symbol	PYCR2
Synonyms	PYCR2; pyrroline-5-carboxylate reductase family, member 2; pyrroline-5-carboxylate reductase 2; P5CR2; P5CR 2; P5C reductase 2; pyrroline 5-carboxylate reductase isoform; FLJ54750;
Gene ID	29920
mRNA Refseq	NM_013328
Protein Refseq	NP_037460
UniProt ID	Q96C36
Chromosome Location	1q42.13
Pathway	Arginine and proline metabolism, organism-specific biosystem; Arginine and proline metabolism, conserved biosystem; Metabolic pathways, organism-specific biosystem; Proline biosynthesis, glutamate =>proline, organism-specific biosystem; Proline

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biosynthesis, glutamate => proline, conserved biosystem;

Function

nucleotide binding; oxidoreductase activity; oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor; pyrroline-5-carboxylate reductase activity;

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