

## Recombinant Human PYCRL, His-tagged

Cat. No. PYCRL-7124H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human PYCRL protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	1-274aa
<b>Description</b>	PYCRL belongs to the pyrroline-5-carboxylate reductase family and functions as a homodecamer. It may play a critical role in proline bio-synthesis. Proline functions as a non-enzymatic antioxidant to minimize damage caused by reactive oxygen species (ROS) in microorganisms, animals and plants. In the last step of proline biosynthesis, PYCRL catalyzes the reduction of aldehyde dehydrogenase 4A1 (ALDH4A1) to proline using NAD(P)H as the cofactor.
<b>Form</b>	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 50% glycerol, 2mM DTT
<b>Molecular Mass</b>	31 kDa (297aa)
<b>AA Sequence</b>	MGSSHHHHHH SGLVPRGSH MGSMAAAEPS PRRVGFVGAG RMAGAIQGL IRAGKVEAQH ILASAPTDRN LCHFQALGCR TTHSNQEVLQSCLLVIFATK PHVLPVLAEL VAPVVTTEHI LVSVAAGVSL STLEELLPPN TRVLRVLPNL PCVVQEGAIV MARGRHVGSS ETNLLQHLL EACGRCEEVPE AYVDIHTGLS

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GSGVAFVCAF SEALAEGAVK MGMPSSLAHR IAAQTLLGTA KMLLHEGQHP  
AQLRSDVCTP GGTTIYGLHALEQQGLRAAT MSAVEAATCR AKELSRK

**Purity** >90% by SDS - PAGE

**Applications** SDS-PAGE

**Storage** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles

**Concentration** 0.25 mg/ml

## GENE INFORMATION

**Gene Name** PYCRL pyrroline-5-carboxylate reductase-like [ Homo sapiens ]

**Official Symbol** PYCRL

**Synonyms** PYCRL; pyrroline-5-carboxylate reductase-like; pyrroline-5-carboxylate reductase 3; FLJ13852; P5CR 3; P5C reductase 3; pyrroline-5-carboxylate reductase-like protein;

**Gene ID** [65263](#)

**mRNA Refseq** [NM\\_023078](#)

**Protein Refseq** [NP\\_075566](#)

**UniProt ID** [Q53H96](#)

**Chromosome Location** 8q24.3

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**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 biosynthesis, glutamate => proline, conserved biosystem;

**Function**

identical protein binding; 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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