## **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-311aa

**UniProt No.** Q9HAB8

NCBI Accession No. NP\_078940

**Alternative Names** Phosphopantothenate--cysteine ligase, COAB, PPC synthetase

# **PRODUCT SPECIFICATION**

Molecular Weight 36.1 kDa (331aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by Bradford assay)

**Formulation** Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

**Purity** > 95% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

### BACKGROUND

#### Description

PPCS, also known as phosphopantothenate--cysteine ligase, catalyzes the first step in the biosynthesis of coenzyme A (CoA) from pantothenic acid (vitamin B5), which is an essential universal pathway in prokaryotes and eukaryotes. PPCS, one of the last enzymes in this pathway, converts phosphopantothenate to phosphopantothenoylcysteine. Recombinant human PPCS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.



#### **Amino acid Sequence**

MGSSHHHHHH SSGLVPRGSH MAEMDPVAEF PQPPGAARWA EVMARFAARL GAQGRRVVLV TSGGTKVPLE ARPVRFLDNF SSGRRGATSA EAFLAAGYGV LFLYRARSAF PYAHRFPPQT WLSALRPSGP ALSGLLSLEA EENALPGFAE ALRSYQEAAA AGTFLAVEFT TLADYLHLLQ AAAQALNPLG PSAMFYLAAA VSDFYVPVSE MPEHKIQSSG GPLQITMKMV PKLLSPLVKD WAPKAFIISF KLETDPAIVI NRARKALEIY QHQVVVANIL ESRQSFVFIV TKDSETKLLL SEEEIEKGVE IEEKIVDNLQ SRHTAFIGDR N

### **General References**

Manoj N. et al. (2003) Structure. 11 : 927-936. Christina Spry. et al. (2009) J Biol Chem. 284: 24904-24913.

# DATA



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

