



# Recombinant Protein Technical Manual

## Recombinant Human Cyclophilin C/PPIC Protein (His&Trx Tag)

RPES1562

### Product Data:

**Product SKU:** RPES1562

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P45877

### Protein Information:

**Molecular Mass:** 33.8 kDa

**AP Molecular Mass:** 34 kDa

**Tag:** N-Trx

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 10% Glycerol, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Peptidyl-Prolyl Cis-Trans Isomerase C; PPIase C; Cyclophilin C; Rotamase C; PPIC; CYPC

## Immunogen Information:

**Sequence:** Lys31-Asp182

## Background:

Cyclophilin C is an enzyme (EC 5.2.1.8) found in both prokaryotes and eukaryotes that interconverts the cis and trans isomers of peptide bonds with the amino acid proline. Proline has an unusually conformationally restrained peptide bond due to its cyclic structure with its side chain bonded to its secondary amine nitrogen. Most amino acids have a strong energetic preference for the trans peptide bond conformation due to steric hindrance, but prolines unusual structure stabilizes the cis form so that both isomers are populated under biologically relevant conditions. Proteins with prolyl isomerase activity include cyclophilin, FKBP, and parvulin, although larger proteins can also contain prolyl isomerase domains.