

# Product information

## QPCT, 29-361aa

Human, His-tagged, Recombinant, Insect cell

Cat. No. IBATGP3153

**Full name:** Glutaminyl-peptidyl cyclotransferase

**NCBI Accession No.:** NP\_036545

**Synonyms:** GCT, QC, sQC

**Description:** QPCT, also known as glutaminyl-peptidyl cyclotransferase, is responsible for the biosynthesis of pyroglutamyl peptides. This protein has a bias against acidic and tryptophan residues adjacent to the N-terminal glutaminyl residue and a lack of importance of chain length after the second residue. It catalyzes N-terminal pyroglutamate formation. In vitro, it catalyzes pyroglutamate formation of N-terminally truncated form of APP amyloid-beta peptides [Glu-3]-beta-amyloid. Recombinant human QPCT, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

**Form:** Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.

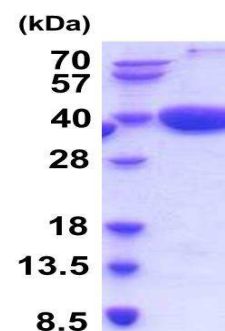
**Molecular Weight:** 38.7kDa (339aa)

28-40kDa (SDS-PAGE under reducing conditions)

**Purity:** > 90% by SDS – PAGE.

**Concentration:** 0.5mg/ml (determined by Absorbance at 280nm)

**Endotoxin Level:** < 1.0 EU per 1µg of protein (determined by LAL method)



15% SDS-PAGE (3µg)

### Sequences of amino acids:

VSPSASAWPE EKNYHQPAIL NSSALRQIAE GTSISEMWQN DLQPLLIERY PGSPGSYAAR QHIMQRIQRL QADWVLEIDT FLSQTPYGYR  
SFSNIISTLN PTAKRHLVLA CHYDSKYFSH WNNRVFVGAT DSAVPCAMML ELARALDKKL LSLKTVSDSK PDLSQLIFF DGEEAFLHWS  
PQDSLYGSRH LAAKMASTPH PPGARGTSQL HGMOLLVLLD LIGAPNPTFP NFFPNSARWF ERLQAIHEL HELGLLKDHS LEGRYFQNY  
YGGVIQDDHI PFLRRGVPVL HLIPSPFPEV WHTMDNNEEN LDESTIDNLN KILQVFVLEY LHLHHHHH

### General references:

Schilling S. *et al.*, (2004) *FEBS Lett.* 563:191-196.

Huang K.F. *et al.*, (2011) *J. Biol. Chem.* 286:12439-12449.

**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.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



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