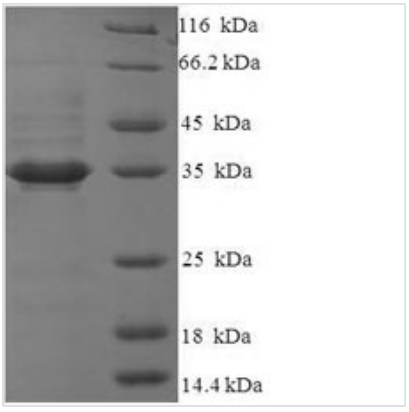
Recombinant Human Glutaminyl-peptide cyclotransferase-like protein (QPCTL), partial

Product Code	CSB-EP868351HU
Relevance	Responsible for the biosynthesis of pyroglutamyl peptides.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9NXS2
Alias	Golgi-resident glutaminyl-peptide cyclotransferaseisoQC ;gQC
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AAPVTLQLLFLDGEEALKEWGPKDSLYGSRHLAQLMESIPHSPGPTRIQAIELF MLLDLLGAPNPTFYSHFPRTVRWFHRLRSIEKRLHRLNLLQSHPQEVMYFQPG EPFGSVEDDHIPFLRRGVPVLHLISTPFPAVWHTPADTEVNLHPPTVHNLCRIL AVFLAEYLGL
Lead Time	3-7 business days
Research Area	Cell Biology
Source	E.coli
Gene Names	QPCTL
Expression Region	212-382aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	35.5kDa
Protein Description	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The Human QPCTL recombinant protein is conventionally generated by transfecting the recombinant DNA into a host cell, and then the host cells are cultured and the transfected DNA transcribed and translated. Different host cells can be chosen for recombinant protein production, the choice of which depends on the type of protein that needs to be generated, its functional activity and requisite yield. We choose E.coli as the expression system for this QPCTL protein expression because bacteria cells are easy to culture, grow fast and produce high yields of recombinant protein.

QPCTL is a protein coding gene that encodes Golgi-resident glutaminyl-peptide cyclotransferase (isoQC). According to some studies, QPCTL may have the following features.
Two insertion variants in the promoter region of the QPCTL gene were significantly associated with chicken body weight and carcass traits. QPCTL knockout mice show different substrate turnover for glutamine cyclase isoenzymes. QPCTL is essential for pyroglutamate formation at the SIRPα binding site on CD47 shortly after biosynthesis. The QPCT transcript level was higher in thyroid cancer, whereas the expression of the QPCTL gene was not affected.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.