PRODUCT INFORMATION

Expression system Baculovirus

Domain 26-449aa

UniProt No. Q15113

NCBI Accession No. NP_002584

Alternative Names Procollagen C-endopeptidase enhancer 1, PCOLCE PCPE, PCPE-1, PCPE1

PRODUCT SPECIFICATION

Molecular Weight 46.6 kDa (433aa)

Concentration 0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.1M NaCl.

Purity

> 95% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

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

PCOLCE, also known as procollagen C-endopeptidase enhancer 1, is a secreted extracellular matrix glycoprotein. This protein is expressed primarily by interstitial connective tissues such as tendons, calvaria, and skin. Also, fibrillar collagen types I-III are synthesized as precursor molecules known as procollagens. These precursors contain amino- and carboxyl-terminal peptide extensions known as N- and C-propeptides, respectively, which are



cleaved, upon secretion of procollagen from the cell, to yield the mature triple helical, highly structured fibrils. Also, this protein binds and drives the enzymatic cleavage of type 1 procollagen and heightens C-proteinase activity. Recombinant human PCOLCE, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

ADPQTPNYTR PVFLCGGDVK GESGYVASEG FPNLYPPNKE CIWTITVPEG QTVSLSFRVF DLELHPACRY DALEVFAGSG TSGQRLGRFC GTFRPAPLVA PGNQVTLRMT TDEGTGGRGF LLWYSGRATS GTEHQFCGGR LEKAQGTLTT PNWPESDYPP GISCSWHIIA PPDQVIALTF EKFDLEPDTY CRYDSVSVFN GAVSDDSRRL GKFCGDAVPG SISSEGNELL VQFVSDLSVT ADGFSASYKT LPRGTAKEGQ GPGPKRGTEP KVKLPPKSQP PEKTEESPSA PDAPTCPKQC RRTGTLQSNF CASSLVVTAT VKSMVREPGE GLAVTVSLIG AYKTGGLDLP SPPTGASLKF YVPCKQCPPM KKGVSYLLMG QVEENRGPVL PPESFVVLHR PNQDQILTNL SKRKCPSQPV RAAASQDHHH HHH

General References

Takahara K., et al, (1994) J. Biol. Chem. 269:26280-26285. Scott IC., et al, (1999) Genomics 55:229-234.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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

