

Recombinant human PRCP protein

Catalog Number: ATGP4088

PRODUCT INFORMATION

Expression system

HEK293

Domain

22-496aa

UniProt No.

P42785

NCBI Accession No.

NP_005031.1

Alternative Names

Prolylcarboxypeptidase, HUMPCP, PCP, lysosomal Pro-X carboxypeptidase isoform1, Angiotensinase C, Lysosomal carboxypeptidase C, Proline carboxypeptidase

PRODUCT SPECIFICATION

Molecular Weight

54.3kDa (481aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1µg of protein (determined by LAL method)

Biological Activity

Specific activity is > 3,000 pmol/min/µg, and is defined as the amount of enzyme that convert 1.0 pmole of Z-Pro-Ala-OH per minute at pH 4.0 at 25C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

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.

Recombinant human PRCP protein

Catalog Number: ATGP4088

BACKGROUND

Description

PRCP, also known as prolylcarboxypeptidase, is a member of the peptidase S28 family of serine exopeptidases. This protein is proteolytically processed to generate the mature lysosomal prolylcarboxypeptidase. This enzyme cleaves C-terminal amino acids linked to proline in peptides such as angiotension 2, 3 and des-Arg9-bradykinin. The cleavage occurs at acidic pH, but the enzyme activity is retained with some substrates at neutral pH. It has been shown to be an activator of the cell matrix-associated prekallikrein. The importance of angiotension 2, one of the substrates of this enzyme, in regulating blood pressure and electrolyte balance suggests that PRCP may be related to essential hypertension. Recombinant human PRCP, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

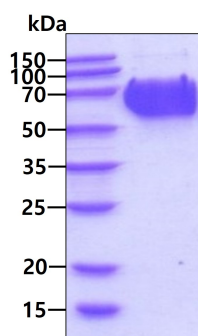
LRPALRALGS LHLPTNPTSL PAVAKNYSVL YFQQKVDHFG FNTVKTFNQR YLVADKYWKK NGGSILFYTG NEGDIIWFCN
NTGFMWDVAE ELKAMLVFAE HRYYGESLPF GDNSFKDSRH LNFLTSEQAL ADFAELIKHL KRTIPGAENQ PVIAGGSYG
GMLAAWFRMK YPHMVVGALA ASAPIWQFED LVPCGVFMKI VTDFRKSGP HCSESIHRSW DAINRLSNTG SGLQWLTGAL
HLCSP LTSQD IQHLKDWIS E TWVNLAMVDY PYASNFLQPL PAWPIKVVCC YLKNPNVSDS LLLQNIFQAL NVYYNYSQV
KCLNISE TAT SSLGTLGWSY QACTEVVMPF CTNGVDDMFE PHSWNLKELS DDCFQQWGVR PRPSWITTM Y GGKNISSHTN
IVFSNGELDP WSGGGVTKDI TDTLVAVTIS EGAHHLDLRT KNALDPMSVL LARSLEVRHM KNWIRDFYDS AGKQ<HHHHHH
H>

General References

- Diano S. (2011) *Front Neuroendocrinol.* 32:70-83.
hagedorn M. (2013) *Blood.* 122:1337-1338.
Duan L., et al, (2014) *J Biol Chem.* 289:21694-21705.

DATA

SDS-PAGE



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