

AR50777PU-S**Human Carboxypeptidase E (43-476, His-tag) - Purified****Alternate names:**

CPE, Carboxypeptidase H, Enkephalin convertase, Prohormone-processing carboxypeptidase

Quantity:

0.1 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

CPE is a carboxypeptidase that cleaves C-terminal amino acid residues and is involved in the biosynthesis of peptide hormones and neurotransmitters, including insulin. It is a peripheral membrane protein. The protein specifically binds regulated secretory pathway proteins, including prohormones, but constitutively secreted proteins. Mutations in CPE are implicated in type II diabetes.

Uniprot ID:[P16870](#)**NCBI:**[NP_001864](#)**GeneID:**[1363](#)**Species:**

Human

Source:

E. coli

Format:**State:** Liquid purified protein**Purity:** >85% by SDS - PAGE**Buffer System:** 20 mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT**Description:**

Recombinant human CPE protein, fused to His-tag at N-terminus, was expressed in E.coli.

AA Sequence:

```
MGSSHHHHHH SSGLVPRGSH MGS LQQEDGI SFEYHRYPEL REALVSVWLQ CTAISRIYTV
GRSFEGRELL VIELSDNPGV HEPGEPEFKY IG NMHGNEAV GRELLIFLAQ YLCNEYQKGN
ETIVNLIHST RIHIMP SLNP DGF EKAASQP GELKDFVGR SNAQGIDLNR NFPDLDRIVY
VNEKEGGPNN HLLKNMKKIV DQNTKLAPET KAVIHWIMDI PFVLSANLHG GDLVANYPYD
ETRSGSAHEY SSSPDDAIFQ SLARAYSSFN PAMSDPNRPP CRKNDDSSSF VDGTTNGGAW
YSVPGGMQDF NYLSSNCFEI TVELSCEKFP PEETLKTYWE DNKNSLISYL EQIHRGVKGF
VRDLQGNPIA NATISVEGID HDVTSAKDGD YWRLLIPGNY KLTASAPGYL AITKKVAVPY
SPAAGVDFEL ESF SERKEEE KEELMEWWKM MSETLNF
```

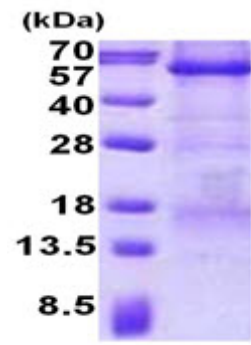
Molecular weight: 51.4 kDa (457aa)**Storage:**

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

Chu, K.Y., et al. (2011) *Islets* 3 (4), 155-165; Lee, T.K., et al. (2011) *J. Clin. Invest.* 121 (3), 880-892

Pictures:



15% SDS-PAGE (3ug)