# Recombinant human CPE protein (rFc Tag)

**Catalog Number: Eg2989**

## Basic Information

**Species:**
Human

**Purity:**
>85 %, SDS-PAGE

**Tag:**
C-rFc

## Technical Specifications

**Purity:**
>85 %, SDS-PAGE

**Endotoxin Level:**
<0.1 EU/μg protein, LAL method

**Source:**
HEK293-derived Human CPE protein Glu26-Ser453 (Accession# P16870-1) with a rabbit IgG Fc tag at the C-terminus

**GeneID:**
1363

**Accession:**
P16870-1

**Predicted Molecular Mass:**
73.9 kDa

**SDS-PAGE:**
68-80 kDa, reducing (R) condition

**Formulation:**
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Not tested

## Storage and Shipping

**Storage:**
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

**Shipping:**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

CPE is a multifunctional protein harboring both enzymatic and nonenzymatic functions, largely expressed in endocrine cells and peptidergic neurons in the nervous system. Full-length CPE (F-CPE) protein is an inhibitor of Wnt/β-catenin signaling, which disrupts disheveled-induced signalosomes that are important for transducing the Wnt signal and reduces β-catenin protein levels and activity (PMID: 22824791). Defects in the gene encoding carboxypeptidase E (CPE) in either mouse or human lead to multiple endocrine disorders, including obesity and diabetes (PMID: 16219026).
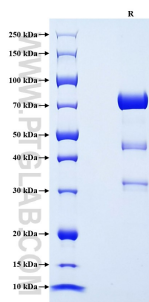
## References

1. Skalka N. et al. (2013). Oncogene. 32(23):2836-47.
2. Zhu X. et al. (2005). J Neurochem. 95(5):1351-62.

## Synonyms

Carboxypeptidase E, Carboxypeptidase H, CPE, CPH, EC:3.4.17.10

## Selected Validation Data



Purity of Recombinant Human CPE was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) condition and stained using Coomassie blue.