



Recombinant Protein Technical Manual

**Recombinant Human Carboxypeptidase E/CPE
Protein (His Tag)**
RPES4486

Product Data:

Product SKU: RPES4486

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P16870

Protein Information:

Molecular Mass: 47.1 kDa

AP Molecular Mass: 57 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 1mM ZnCl₂, 10% Glycerol, pH 7.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Carboxypeptidase E (CPE for short); Carboxypeptidase H; Enkephalin convertase; Prohormone-processing carboxypeptidase

Immunogen Information:

Sequence: Arg42-Ser453

Background:

The active form of CPE cleaves C-terminal amino acid residues of the peptide, and is thus involved in the biosynthesis of peptide hormones and neurotransmitters including insulin, enkephalin, etc. It is thought that membrane-associated CPE acts as a sorting receptor for targeting regulated secretory proteins which are mostly prohormones and neuropeptides in the trans-Golgi network of the pituitary and in secretory granules into the secretory pathway. Defects in this protein are implicated in type II diabetes due to impaired glucose clearance and insulin resistance.