Recombinant Mouse Cpe, His-tagged

Cat. No. Cpe-214M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse CPE MS Standard Protein, C13 and N15-labeled (Mouse CPE, Heavy Labeled) Gln 28 - Phe 476 (Accession # NP_038522) was produced in human 293 cells (HEK293) with fully chemically defined cell culture medium to obtain >99% incorporation effi
Species	Mouse
Source	HEK293
ProteinLength	28-476 a.a.
Description	Carboxypeptidase E (CPE) is also known as Carboxypeptidase H or enkephalin convertase. Carboxypeptidase E cleaves C-terminal amino acid residues and is involved in neuropeptide processing. It is a peripheral membrane protein. CPE specifically binds regulated secretory pathway proteins, including prohormones, but not constitutively secreted proteins. Carboxypeptidase E appears to have several functions. The active form of carboxypeptidase E was shown to be in secretory vesicles, where it acts as an exopeptidase to activate neuropeptides, It does that by cleaving off basic C-terminal amino acids, producing the active form of the peptide. Products of carboxypeptidase E include insulin, enkephalin, and most other neuroendocrine peptides.It has also been proposed that membrane-associated carboxypeptidase E acts as a sorting signal for regulated secretory proteins in the trans-Golgi network of the pituitary and in secretory granules; regulated secretory proteins are mostly hormones and neuropeptides. Mice with mutant carboxypeptidase

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	E Cpe, display endocrine disorders like obesity and infertility.
Form	Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally Mannitol or Trehalose are added as protectants before lyophilization.
Molecular Mass	Mouse CPE, Heavy Labeled is fused with polyhistidine tag at the C-terminus, and has a calculated MW of 52 kDa. The predicted N-terminus is Gln 28. DTT-reduced Protein migrates as 52 kDa in SDS-PAGE .Mouse CPE, Heavy Labeled is labeled with [U-13C6, 15N4
Endotoxin	Less than 1.0 EU per μg of the Mouse CPE, Heavy Labeled by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze-thaw cycles.No activity loss was observed after storage at:In lyophilized state for 1 year (4oC); After reconstitution under sterile conditions for 3 months (-70oC).
Reconstitution	See Certificate of Analysis for reconstitution instructions and specific concentrations.

GENE INFORMATION

Gene Name	Cpe carboxypeptidase E [Mus musculus]
Official Symbol	Cpe
Synonyms	CPE; carboxypeptidase E; carboxypeptidase H; enkephalin convertase; prohormone-processing carboxypeptidase; CPH; fat; Cph1; Cph-1; R74677; MGC7101;
Gene ID	12876

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_013494
Protein Refseq	NP_038522
Pathway	Diabetes pathways, organism-specific biosystem; Disease, organism-specific biosystem; Insulin Synthesis and Processing, organism-specific biosystem; Type I diabetes mellitus, organism-specific biosystem; Type I diabetes mellitus, conserved biosystem;
Function	carboxypeptidase activity; cell adhesion molecule binding; cobalt ion binding; hydrolase activity; metal ion binding; metallocarboxypeptidase activity; metallopeptidase activity; neurexin family protein binding; peptidase activity; zinc ion binding;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA