

Datasheet for ABIN7194612

CPE Protein (His tag)



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Overview

Quantity:	50 µg
Target:	CPE
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CPE protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Carboxypeptidase E/CPE Protein (His Tag)(Active)
Sequence:	Met 1-Ser 453
Characteristics:	A DNA sequence encoding the human carboxypeptidase E (CPE) precursor (NP_001864.1) (Met 1-Ser 453) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave a peptide substrate, benzoyl-AR-OH. The product, Arg, reacted with orthophthaldialdehyde (OPA) to form a fluorescent molecule. The specific activity is >12,000 pmoles/min/µg.

Target Details

Target:	CPE
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Target Details

Alternative Name:	Carboxypeptidase E/CPE (CPE Products)
Background:	<p>Background: Carboxypeptidase E (CPE), also known as Carboxypeptidase H, is a peripheral membrane protein and a zinc metallocarboxypeptidase, and the conversion of proCPE into CPE occurs primarily in secretory vesicles. 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. The enzymatic activity is enhanced by millimolar concentrations of Co²⁺. It has also been proposed that membrane-associated carboxypeptidase E 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. Its interaction with glycosphingolipid-cholesterol rafts at the TGN facilitates the targeting. Mutations in this gene are implicated in type I I diabetes due to impaired glucose clearance and insulin resistance.</p> <p>Synonym: Carboxypeptidase E(CPE for short); Carboxypeptidase H; Enkephalin convertase; Prohormone-processing carboxypeptidase</p>
Molecular Weight:	49.4 kDa
NCBI Accession:	NP_001864
Pathways:	Peptide Hormone Metabolism, Synaptic Membrane

Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C, -20 °C, -80 °C
Storage Comment:	<p>Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.</p> <p>Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>