

CPE Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP7657b

Specification

CPE Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P16870

CPE Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 1363

Other Names

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP7657b was selected from the C-term region of human CPE. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CPE Antibody (C-term) Blocking Peptide - Protein Information

Name CPE

CPE Antibody (C-term) Blocking Peptide - 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 not constitutively secreted proteins. Mutations in CPE gene are implicated in type II diabetes.

CPE Antibody (C-term) Blocking Peptide - References

Oiso,S., J. Neurochem. 109 (1), 158-167 (2009)Yang,L., Ann. N. Y. Acad. Sci. 1150, 263-266 (2008)Jeffrey,K.D., Proc. Natl. Acad. Sci. U.S.A. 105 (24), 8452-8457 (2008)



Function

Sorting receptor that directs prohormones to the regulated secretory pathway. Acts also as a prohormone processing enzyme in neuro/endocrine cells, removing dibasic residues from the C-terminal end of peptide hormone precursors after initial endoprotease cleavage.

Cellular Location

[Isoform 1]: Cytoplasmic vesicle, secretory vesicle {ECO:0000250|UniProtKB:Q00493}. Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:P15087}; Peripheral membrane protein {ECO:0000250|UniProtKB:P15087}. Secreted {ECO:0000250|UniProtKB:P15087}. Note=Associated with the secretory granule membrane through direct binding to lipid rafts in intragranular conditions. {ECO:0000250|UniProtKB:Q00493}

CPE Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides