

CPE Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7657b

Specification

CPE Antibody (C-term) - Product Information

Application WB,E
Primary Accession P16870

Other Accession
Reactivity
Predicted

Q4R4M3, P04836
Human, Mouse
Bovine, Monkey

Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
Calculated MW 53151
Antigen Region 381-412

CPE Antibody (C-term) - Additional Information

Gene ID 1363

Other Names

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

Target/Specificity

This CPE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 381-412 amino acids from the C-terminal region of human CPE.

Dilution

WB~~1:1000

Format

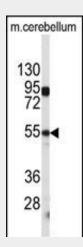
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

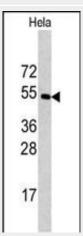
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CPE Antibody (C-term) is for research use



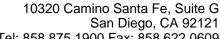
Western blot analysis of CPE antibody (C-term) (Cat.#AP7657b) in mouse cerebellum tissue lysates (35ug/lane). CPE (arrow) was detected using the purified Pab.



Western blot analysis of CPE antibody (C-term)(Cat.#AP7657b) in Hela cell line lysates (35ug/lane). CPE (arrow) was detected using the purified Pab.

CPE Antibody (C-term) - 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





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only and not for use in diagnostic or therapeutic procedures.

CPE Antibody (C-term) - Protein Information

Name CPE

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}

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) - 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)

CPE Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture