

**CPE Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7657b****Specification**

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**CPE Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P16870</a>
Other Accession	<a href="#">O4R4M3</a> , <a href="#">P04836</a>
Reactivity	Human, Mouse
Predicted	Bovine, Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
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 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

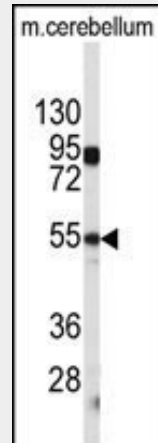
[Isoform 1]: Cytoplasmic vesicle, secretory vesicle {ECO:0000250|UniProtKB:Q00493}. Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:P15087}; Peripheral membrane protein {ECO:0000250|UniProtKB:P15087}. Secreted {ECO:0000250|UniProtKB:P15087}. Note=Associated with the secretory granule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

#### CPE Antibody (C-term) - Protocols

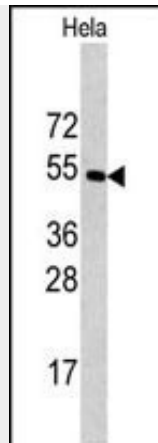
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### CPE Antibody (C-term) - Images



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 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)