

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

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7657b

### Specification

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

WB,E <u>P16870</u> <u>O4R4M3</u>, <u>P04836</u> Human, Mouse Bovine, Monkey Rabbit Polyclonal Rabbit IgG 53151 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 E~~Use at an assay dependent concentration.

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. Also acts 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.

- <u>Western Blot</u>
- **Blocking Peptides**
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **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)