

CPTC-CPE-2 (CAB080182)

Uniprot ID: [P16870](#)

Protein name: CBPE_HUMAN

Full name: Carboxypeptidase E

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.

Subcellular location:

Isoform 1:

Cytoplasmic vesicle > Secretory vesicle (*by similarity*)

Cytoplasmic vesicle > Secretory vesicle membrane (*by similarity*) (Topo: Peripheral membrane protein (*by similarity*))

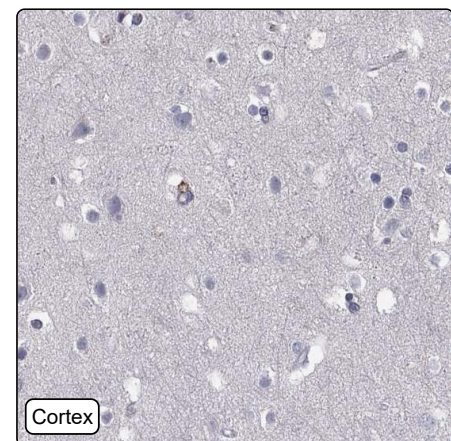
Secreted (*by similarity*)

NOTE: Associated with the secretory granule membrane through direct binding to lipid rafts in intragranular conditions.

Protein existence: Experimental evidence at protein level

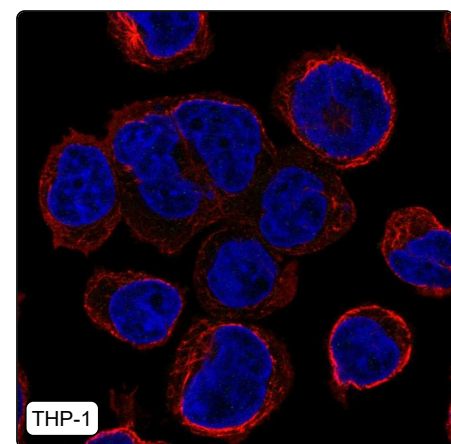
Comment:

Immunohistochemistry



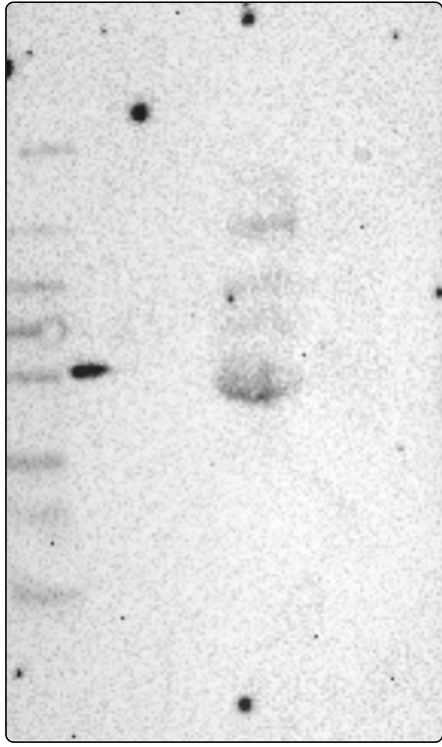
IHC protocol:	HIER pH6, Dilution 1:500
IHC test staining:	Negative in all tissues.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Tissue enhanced (brain,retina)
RNA tissue distribution:	Detected in all
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern
IHC fail comment:	ANTIBODY FAILED: Negative

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	
IF additional location:	
IF approved for publication on HPA:	No
IF in THP-1:	Negative
IF in U-2 OS:	Negative

Western blot



WB Size markers (kDa):	250, 130, 100, 70, 55, 35, 25, 15, 10
WB Lanes:	Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6)
WB Target weight (kDa):	16, 17, 18, 53
WB Validation:	Supported (Band of predicted size in kDa (+/-20%) with additional bands present.)