

CPTC-CPE-3 (CAB080183)

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*))

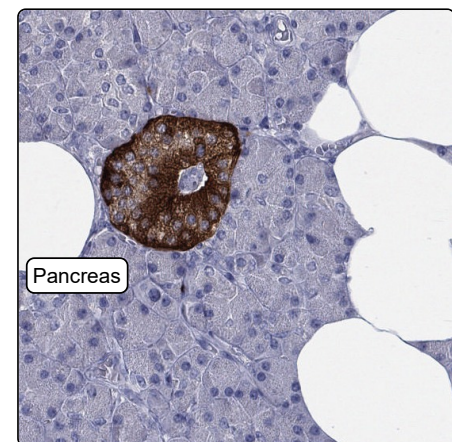
Secreted (*by similarity*)

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:	Positive in endocrine cells.
Literature conformance:	Consistent with extensive gene/protein characterization data
Literature significance:	
RNA similarity:	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 similar IHC staining pattern
Reliability score:	Supported
APE summary:	Distinct cytoplasmic expression mainly in islets of Langerhans, enteroendocrine cells and brain.
APE explanatory sentences:	External characterization data supports antibody staining in islets of Langerhans.
Orthogonal validation:	No
Independent validation:	No
IHC Annotation summary:	Strong cytoplasmic positivity was observed in enteroendocrine cells in gastrointestinal tract, pancreatic endocrine cells, adrenal gland, epididymis and prostate. Strong cytoplasmic positivity was observed in prostate cancer and in carcinoid.