

CPTC-ERBB3-2(CAB080194)

Uniprot ID: [P21860](#)

Protein name: ERBB3_HUMAN

Full name: Receptor tyrosine-protein kinase erbB-3

Tissue specificity: Epithelial tissues and brain.

Function: Tyrosine-protein kinase that plays an essential role as cell surface receptor for neuregulins. Binds to neuregulin-1 (NRG1) and is activated by it; ligand-binding increases phosphorylation on tyrosine residues and promotes its association with the p85 subunit of phosphatidylinositol 3-kinase (PubMed:20682778). May also be activated by CSPG5 (PubMed:15358134). Involved in the regulation of myeloid cell differentiation (PubMed:27416908).

Subcellular location:

Isoform 1:

Cell membrane (*experimental evidence*) (Topo: Single-pass type I membrane protein)

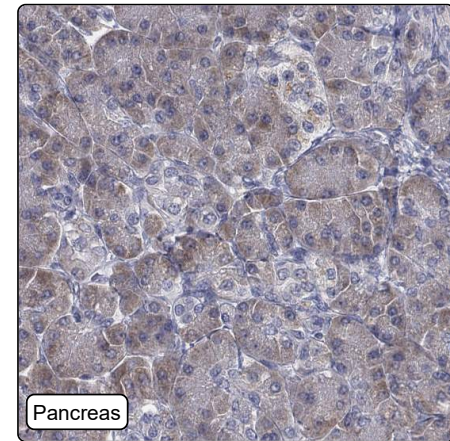
Isoform 2:

Secreted

Protein existence: Experimental evidence at protein level

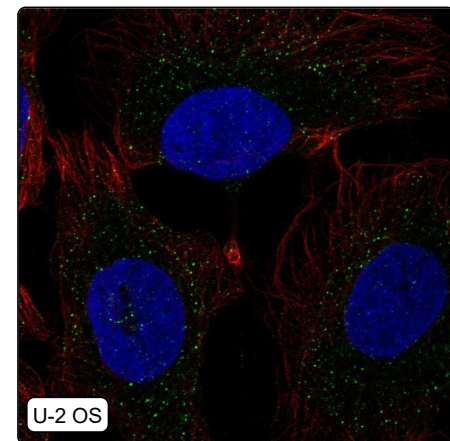
Comment:

Immunohistochemistry



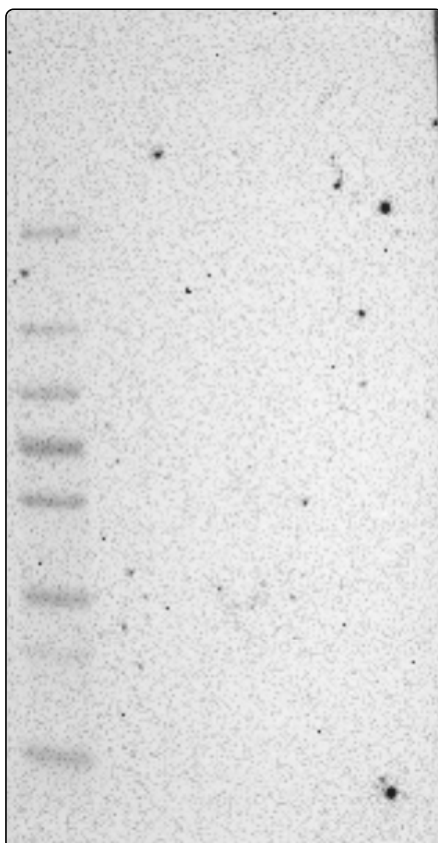
IHC protocol:	HIER pH6, Dilution 1:250
IHC test staining:	Cytoplasmic positivity in pancreas. Lipofuscin positivity in central nervous system and liver. Additional positivity in plasma.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Low tissue specificity
RNA tissue distribution:	Detected in many
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern
IHC fail comment:	ANTIBODY FAILED: Not consistent with RNA

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	Vesicles - 12: Uncertain (auto)
IF additional location:	
IF approved for publication on HPA:	No
IF in THP-1:	Negative
IF in U-2 OS:	Vesicles

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):	2, 9, 13, 13, 14, 20, 51, 64, 72, 142, 148
WB Validation:	Uncertain (No bands detected.)