

CPTC-sHER3-2 (CAB080393)

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)

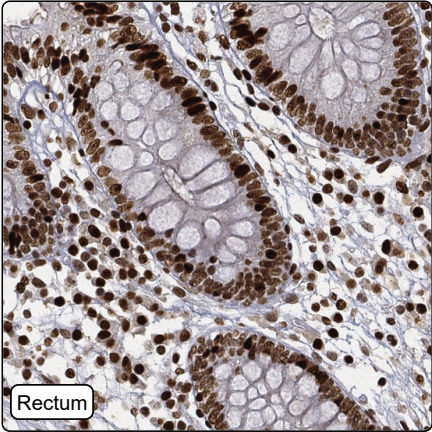
Isoform 2:

Secreted

Protein existence: Experimental evidence at protein level

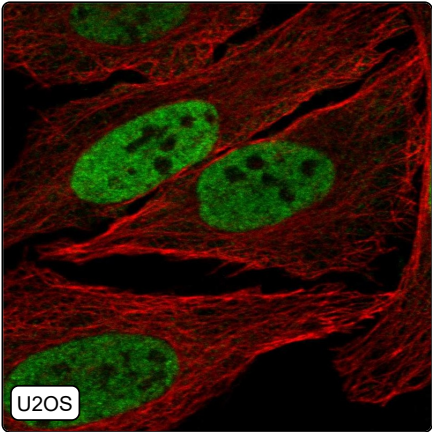
Comment:

Immunohistochemistry



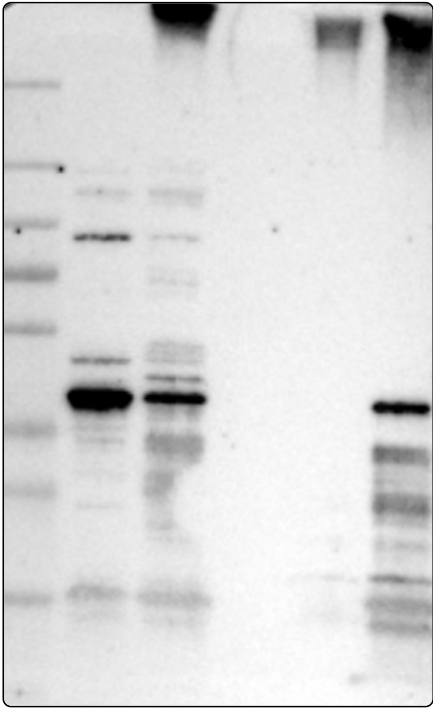
IHC protocol:	HIER pH6, Dilution 1:800
IHC test staining:	Nuclear positivity in most tissues.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Low tissue specificity
RNA tissue distribution:	Detected in many
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	Nucleoplasm - 12: Uncertain (auto)
IF additional location:	Micronucleus - 12: Uncertain (auto)
IF approved for publication on HPA:	No
IF in THP-1:	Nucleoplasm Micronucleus
IF in U2OS:	Nucleoplasm

Western blot



WB Size markers (kDa):	250, 130, 100, 70, 55, 35, 25, 15, 10
WB Lanes:	Marker (1), RT-4 (2), U-251MG (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 (Weak band of predicted size but with additional bands of higher intensity also present.)