

CPTC-DLC1-2 (CAB080187)

Uniprot ID: Q96QB1

Protein name: RHG07_HUMAN

Full name: Rho GTPase-activating protein 7

Tissue specificity: Highest level of expression in the spleen, with rather lower levels in prostate, testis, ovary, small intestine and colon, but none in the thymus.

Function: Functions as a GTPase-activating protein for the small GTPases RHOA, RHOB, RHOC and CDC42, terminating their downstream signaling. This induces morphological changes and detachment through cytoskeletal reorganization, playing a critical role in biological processes such as cell migration and proliferation. Also functions *in vivo* as an activator of the phospholipase PLCD1. Active DLC1 increases cell migration velocity but reduces directionality.

Subcellular location:

Cytoplasm

Cell junction > Focal adhesion

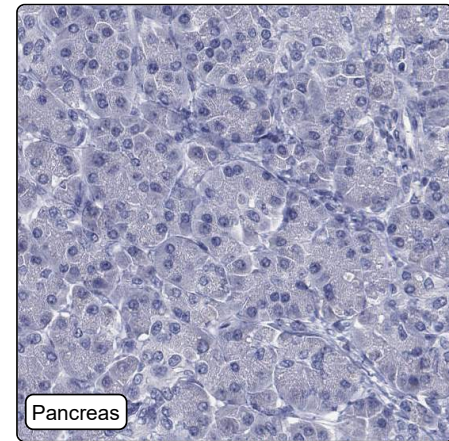
Membrane (Topo: Peripheral membrane protein)

NOTE: Colocalizes with EF1A1 at actin-rich regions in the cell periphery.

Protein existence: Experimental evidence at protein level

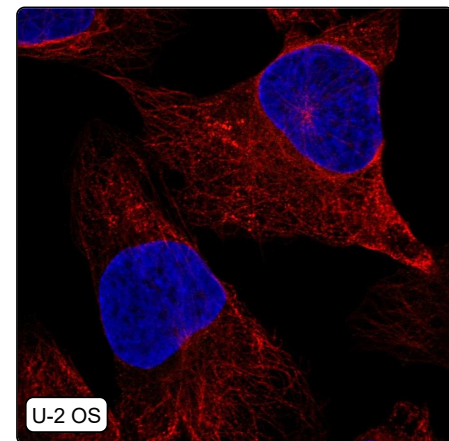
Comment:

Immunohistochemistry



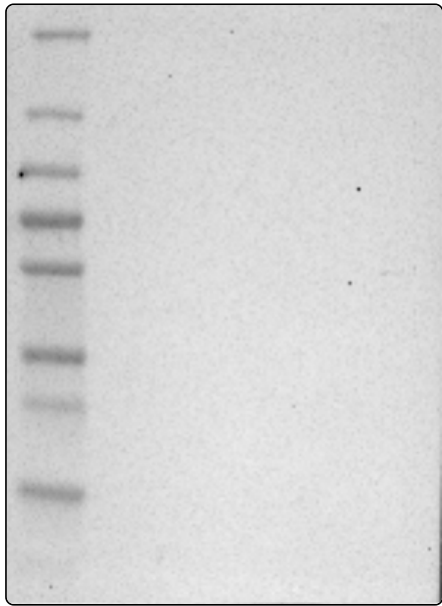
IHC protocol:	HIER pH6, Dilution 1:650
IHC test staining:	Negative in all tissues.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Low tissue specificity
RNA tissue distribution:	Detected in all
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:	
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):	5, 8, 14, 51, 55, 114, 123, 127, 171
WB Validation:	Uncertain (No bands detected.)