

CPTC-DLC1-3(CAB080188)

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

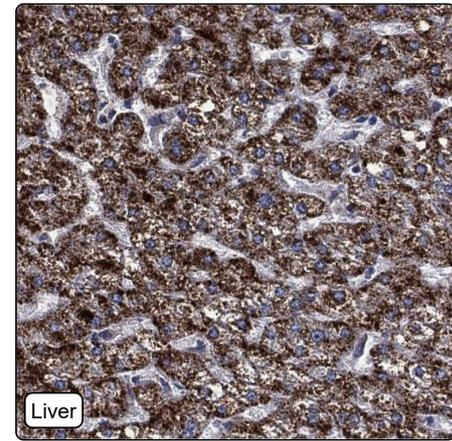
Membrane (Topo: Peripheral membrane protein)

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

Protein existence: Experimental evidence at protein level

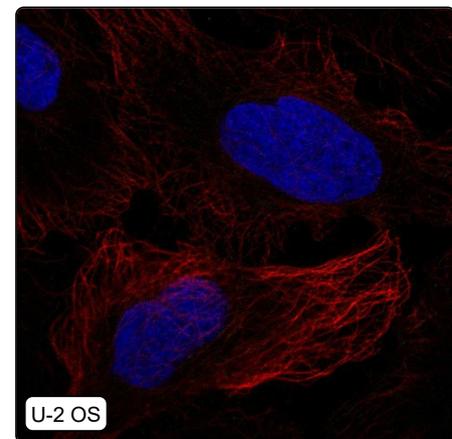
Comment:

Immunohistochemistry



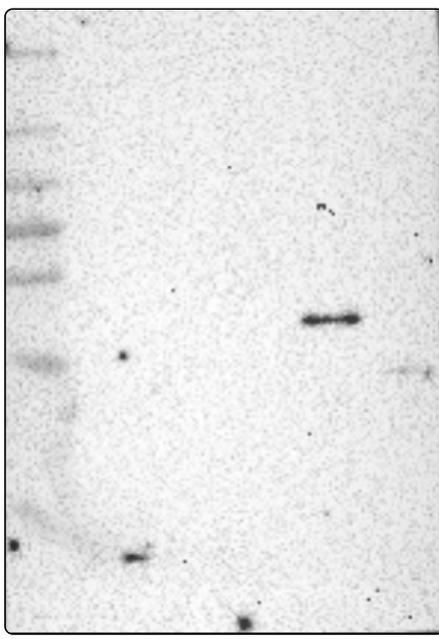
IHC protocol:	HIER pH6, Dilution 1:440
IHC test staining:	Granular cytoplasmic positivity in liver, kidney, gastrointestinal tract and skeletal muscle.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between 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:	Supported (Band of predicted size in kDa (+/-20%) with additional bands present.)