

CPTC-KRAS4B-2 (CAB080343)

Uniprot ID: [P01116](#)

Protein name: RASK_HUMAN

Full name: GTPase KRas

Function: Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (PubMed:20949621). Plays an important role in the regulation of cell proliferation (PubMed:23698361, PubMed:22711838). Plays a role in promoting oncogenic events by inducing transcriptional silencing of tumor suppressor genes (TSGs) in colorectal cancer (CRC) cells in a ZNF304-dependent manner (PubMed:24623306).

Subcellular location:

Unnamed:

Cell membrane (*experimental evidence*) (Topo: Lipid-anchor (*experimental evidence, curator inference*) ; Orientation: Cytoplasmic side (*curator inference*))

Endomembrane system (*experimental evidence*)

Cytoplasm > Cytosol (*experimental evidence*)

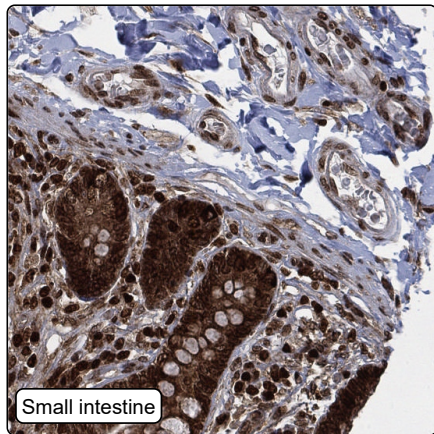
Isoform 2B:

Cell membrane (*experimental evidence*) (Topo: Lipid-anchor (*curator inference*))

Protein existence: Experimental evidence at protein level

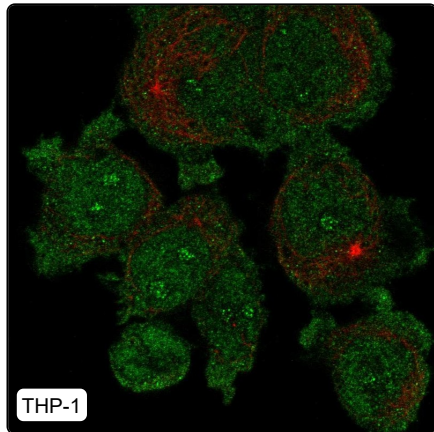
Comment:

Immunohistochemistry



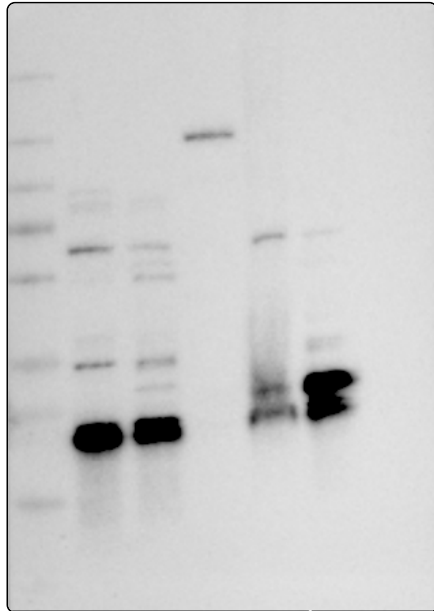
IHC protocol:	HIER pH6, Dilution 1:1000
IHC test staining:	Nuclear and cytoplasmic positivity in most tissues.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Low tissue specificity
RNA tissue distribution:	Detected in all
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	Nucleoli fibrillar center - 12: Uncertain (auto) Nucleoplasm - 12: Uncertain (auto)
IF additional location:	Plasma membrane - 3: Supportive (auto) Cytosol - 3: Supportive (auto)
IF approved for publication on HPA:	No
IF in THP-1:	Nucleoplasm Nucleoli Fibrillar center Plasma membrane
IF in U2OS:	Nucleoplasm Nucleoli Fibrillar center Cytosol

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):	5, 9, 21, 22
WB Validation:	Supported (Band of predicted size in kDa (+/-20%) with additional bands present.)