

CPTC-KRAS4A-1 (CAB080221)

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*)

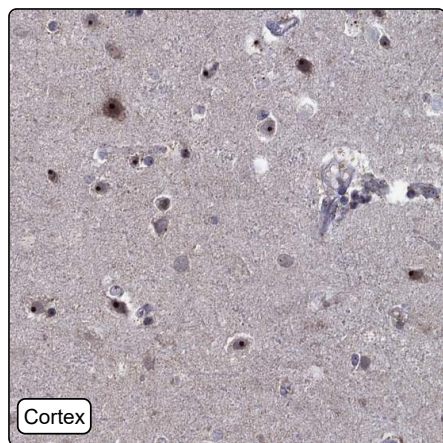
Isoform 2B:

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

Protein existence: Experimental evidence at protein level

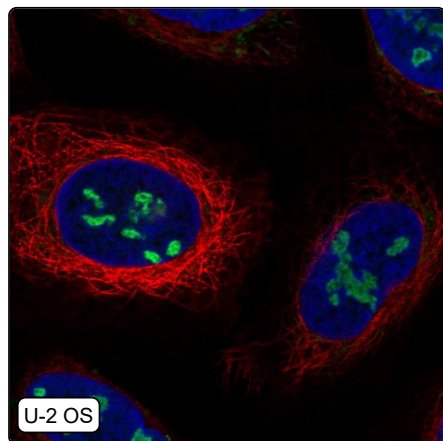
Comment:

Immunohistochemistry



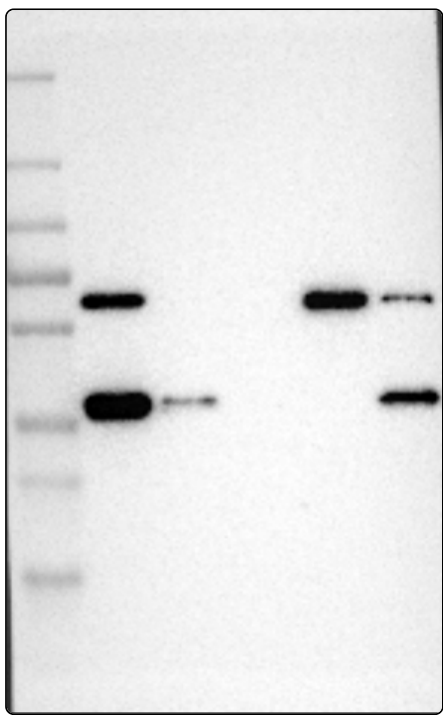
IHC protocol:	HIER pH6, Dilution 1:400
IHC test staining:	Positivity in nucleoli in most tissues. Additional cytoplasmic positivity few tissues.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody 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: Improbable subcellular location, Dissimilar sibling

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	Nucleoli rim - 12: Uncertain (auto)
IF additional location:	Mitochondria - 8: Approved (auto)
IF approved for publication on HPA:	No
IF in THP-1:	Nucleoli rim Mitochondria
IF in U-2 OS:	Nucleoli rim Mitochondria

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, 9, 21, 22
WB Validation:	Uncertain (Only bands not corresponding to the predicted size.)