# CPTC-HRAS-2 (CAB080331)

**Uniprot ID**: P01112
**Protein name**: RASH_HUMAN
**Full name**: GTPase HRas
**Tissue specificity**: Widely expressed.
**Function**: Involved in the activation of Ras protein signal transduction (PubMed:22821884). Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (PubMed:12740440, PubMed:14500341, PubMed:9020151).
**Subcellular location**:
**Unnamed**:
Cell membrane (Topo: Lipid-anchor ; Orientation: Cytoplasmic side)
Golgi apparatus
Golgi apparatus membrane (Topo: Lipid-anchor)
*NOTE*: The active GTP-bound form is localized most strongly to membranes than the inactive GDP-bound form (By similarity). Shuttles between the plasma membrane and the Golgi apparatus.
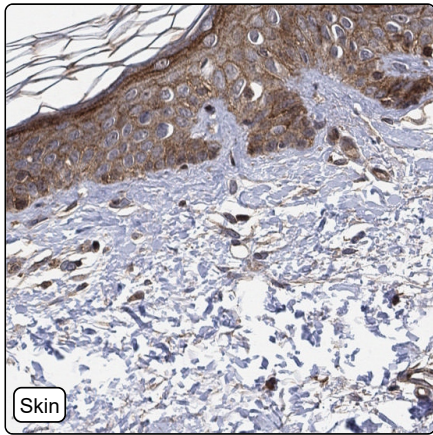**Isoform 2**:
Nucleus
Cytoplasm
Cytoplasm > Perinuclear region
*NOTE*: Colocalizes with RACK1 to the perinuclear region.
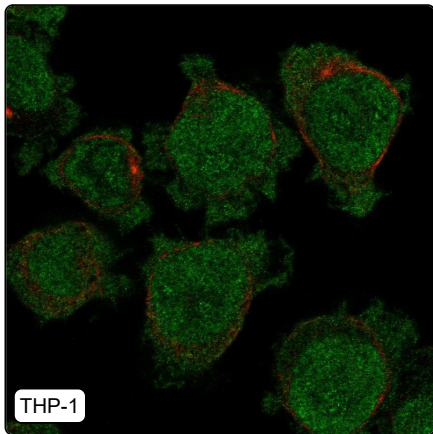**Protein existence**: Experimental evidence at protein level

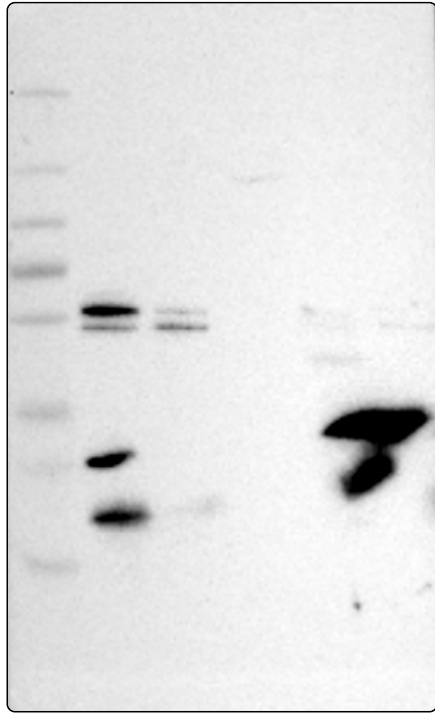**Comment:**

## Immunohistochemistry


Skin

| IHC protocol: | HIER pH6, Dilution 1:260 |
|---|---|
| IHC test staining: | Cytoplasmic positivity in most tissues. |
| Literature conformance: | Consistent with extensive gene/protein characterization data |
| Literature significance: | |
| RNA similarity: | Medium 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 similar IHC staining pattern |

## Immunofluorescence


THP-1

| IF Overlay: | antibody (green), anti-tubulin (red) and DAPI (blue) |
|---|---|
| IF main location: | Plasma membrane - 3: **Supportive** (auto) |
| IF additional location: | Vesicles - 5: **Approved** (auto)<br>Nucleoplasm - 3: **Supportive** (auto) |
| IF approved for publication on HPA: | No |
| IF in THP-1: | Nucleoplasm<br>Plasma membrane |
| IF in U2OS: | Vesicles<br>Plasma membrane |

# 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): | 19, 19, 21, 21, 21 |
| WB Validation: | Supported (Band of predicted size in kDa (+/-20%) with additional bands present.) |