

# CPTC-GRB2-1 (CAB080211)

Uniprot ID: [P62993](#)

Protein name: GRB2\_HUMAN

Full name: Growth factor receptor-bound protein 2

Function: Adapter protein that provides a critical link between cell surface growth factor receptors and the Ras signaling pathway. [Isoform 2]: Does not bind to phosphorylated epidermal growth factor receptor (EGFR) but inhibits EGF-induced transactivation of a RAS-responsive element. Acts as a dominant negative protein over GRB2 and by suppressing proliferative signals, may trigger active programmed cell death.

Subcellular location:

Nucleus (*experimental evidence*)

Cytoplasm (*experimental evidence*)

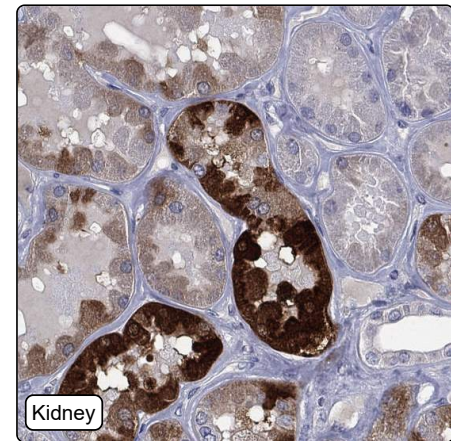
Endosome (*experimental evidence*)

Golgi apparatus (*by similarity*)

Protein existence: Experimental evidence at protein level

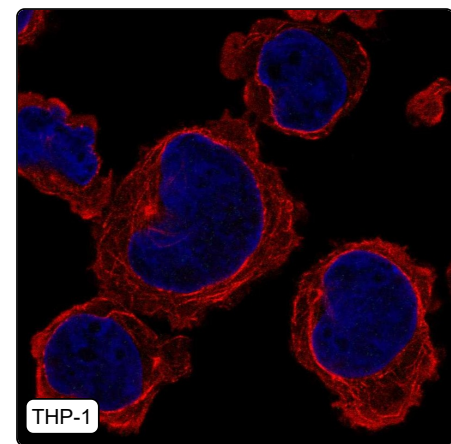
Comment:

## Immunohistochemistry



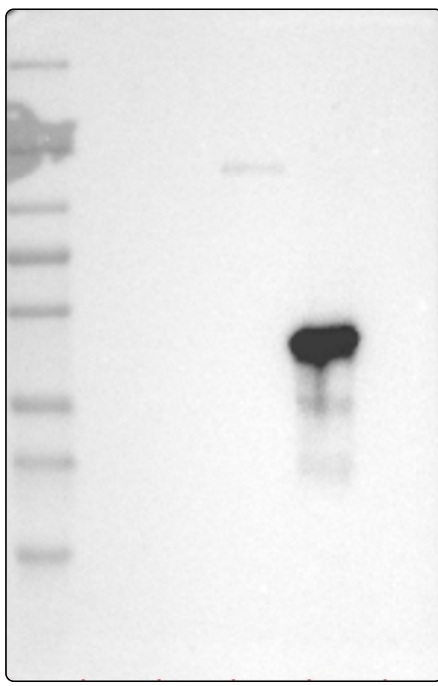
|                          |   |
|--------------------------|---|
| IHC protocol:            | HIER pH6, Dilution 1:700  |
| IHC test staining:       | Cytoplasmic positive in liver, kidney, skeletal muscle, immune cells and cilia. |
| Literature conformance:  | Not consistent with gene/protein characterization 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



|                                |   |
|--------------------------------|---|
| <b>WB Size markers (kDa):</b>  | 250, 130, 100, 70, 55, 35, 25, 15, 10   |
| <b>WB Lanes:</b>               | Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6)                                |
| <b>WB Target weight (kDa):</b> | 5, 13, 18, 21, 21, 25, 25, 25   |
| <b>WB Validation:</b>          | Uncertain (Weak band of predicted size but with additional bands of higher intensity also present.) |