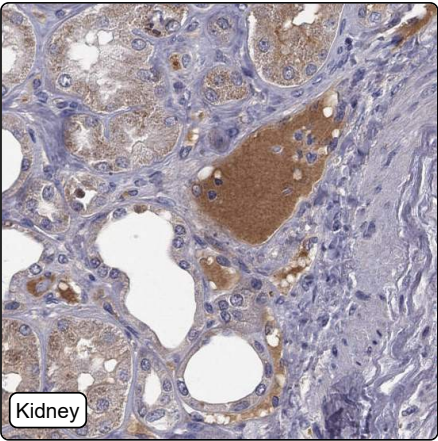


CPTC-MAP2K2-1 (CAB080224)

Uniprot ID: [P36507](#)
Protein name: MP2K2_HUMAN
Full name: Dual specificity mitogen-activated protein kinase kinase 2
Function: Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (PubMed:29433126).
Subcellular location:
Cytoplasm (*experimental evidence*)
Membrane (*experimental evidence*) (Topo: Peripheral membrane protein (*experimental evidence*))
NOTE: Membrane localization is probably regulated by its interaction with KSR1.
Protein existence: Experimental evidence at protein level

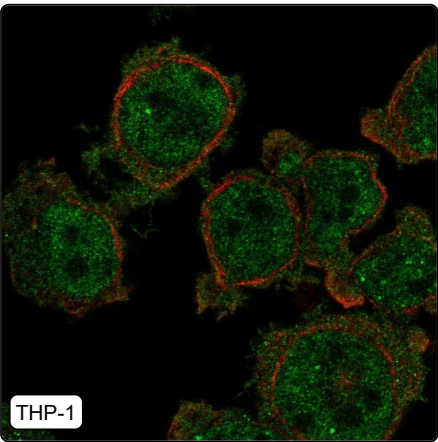
Comment:

Immunohistochemistry



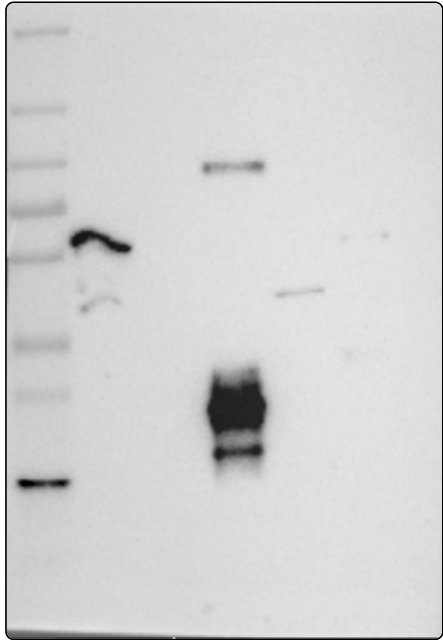
IHC protocol:	HIER pH6, Dilution 1:400
IHC test staining:	Positivity in immune cells and plasma.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	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:	Cytosol - 3: Supportive (auto) Nucleoplasm - 12: Uncertain (auto)
IF additional location:	
IF approved for publication on HPA:	No
IF in THP-1:	Nucleoplasm Cytosol
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):	12, 34, 44
WB Validation:	Uncertain (Weak band of predicted size but with additional bands of higher intensity also present.)