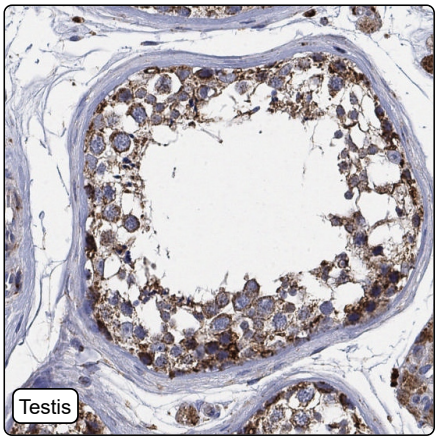
CPTC-RYK-1 (CAB080389)

Uniprot ID: P34925
Protein name: RYK_HUMAN
Full name: Tyrosine-protein kinase RYK
Tissue specificity: Observed in all the tissues examined.
Function: May be a coreceptor along with FZD8 of Wnt proteins, such as WNT1, WNT3, WNT3A and WNT5A. Involved in neuron differentiation, axon guidance, corpus callosum establishment and neurite outgrowth. In response to WNT3 stimulation, receptor C-terminal cleavage occurs in its transmembrane region and allows the C-terminal intracellular product to translocate from the cytoplasm to the nucleus where it plays a crucial role in neuronal development.
Subcellular location:
Membrane (*by similarity*) (Topo: Single-pass type I membrane protein (*by similarity*))
Nucleus (*by similarity*)
Cytoplasm (*by similarity*)
NOTE: In cells that have undergone neuronal differentiation, the C-terminal cleaved part is translocated from the cytoplasm to the nucleus.
Protein existence: Experimental evidence at protein level

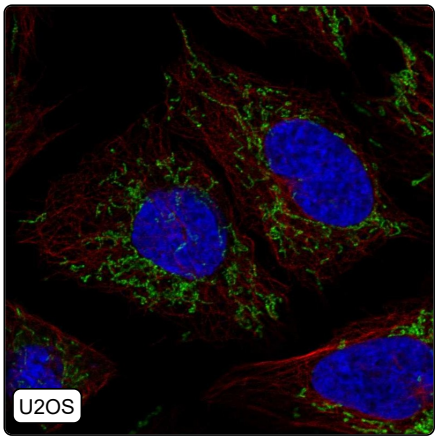
Comment:

Immunohistochemistry



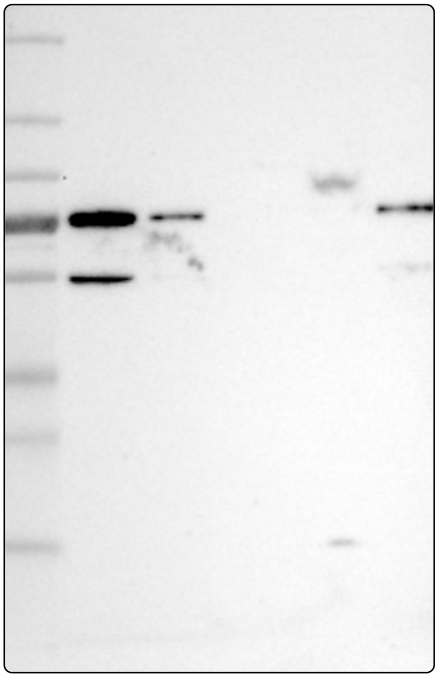
IHC protocol:	HIER pH6, Dilution 1:600
IHC test staining:	Granular cytoplasmic positivity in most tissues.
Literature conformance:	Partly consistent with gene/protein characterization data
Literature significance:	Limited
RNA similarity:	Medium consistency between antibody staining and RNA expression data
RNA tissue specificity:	Low tissue specificity
RNA tissue distribution:	Detected in all
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	Mitochondria - 7: **Approved** (auto)
IF additional location:	
IF approved for publication on HPA:	No
IF in THP-1:	Mitochondria
IF in U2OS:	Mitochondria

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):	62, 68, 68
WB Validation:	Supported (Band of predicted size in kDa (+/-20%) with additional bands present.)