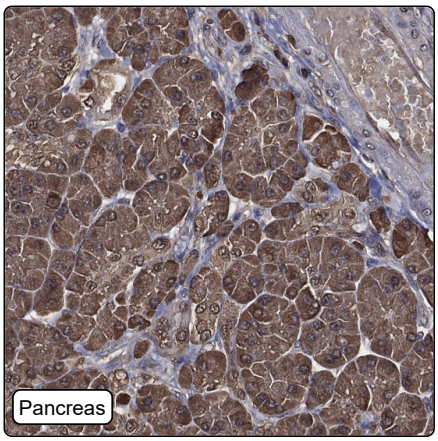
CPTC-PRDX4-5 (CAB080374)

Uniprot ID: Q13162
Protein name: PRDX4_HUMAN
Full name: Peroxiredoxin-4
Function: Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events. Regulates the activation of NF-kappa-B in the cytosol by a modulation of I-kappa-B-alpha phosphorylation.
Subcellular location:
Cytoplasm (*experimental evidence*)
Endoplasmic reticulum (*experimental evidence*)
NOTE: Cotranslationally translocated to and retained within the endoplasmic reticulum. A small fraction of the protein is cytoplasmic.
Protein existence: Experimental evidence at protein level

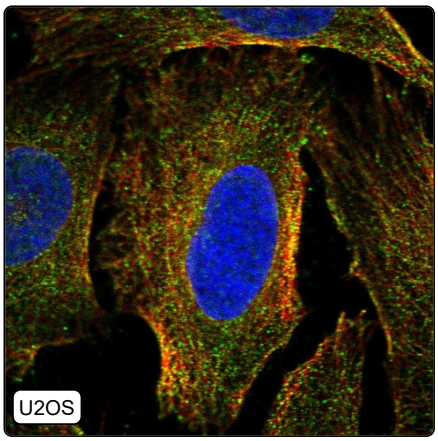
Comment:

Immunohistochemistry



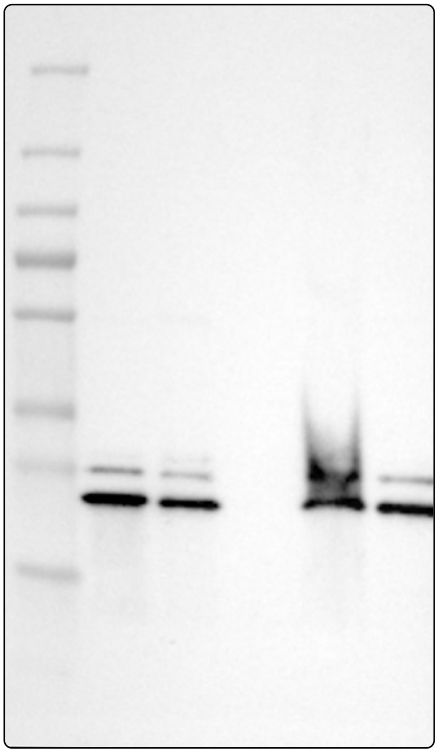
IHC protocol:	HIER pH6, Dilution 1:60000
IHC test staining:	Cytoplasmic positivity in most tissues.
Literature conformance:	Consistent with extensive gene/protein characterization data
Literature significance:	
RNA similarity:	Medium consistency between antibody staining and RNA expression data
RNA tissue specificity:	Tissue enriched (pancreas)
RNA tissue distribution:	Detected in all
IHC Sibling similarity:	Other antibody shows similar IHC staining pattern

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	Microtubules - 5: **Approved** (auto)
IF additional location:	
IF approved for publication on HPA:	No
IF in THP-1:	Negative
IF in U2OS:	Csk(mt)

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):	18, 21, 21, 31
WB Validation:	Supported (Single band corresponding to the predicted size in kDa (+/-20%).)