# CPTC-VTCN1-1 (CAB080409)

**Uniprot ID**: Q7Z7D3
**Protein name**: VTCN1_HUMAN
**Full name**: V-set domain-containing T-cell activation inhibitor 1
**Tissue specificity**: Overexpressed in breast, ovarian, endometrial, renal cell (RCC) and non-small-cell lung cancers (NSCLC). Expressed on activated T- and B-cells, monocytes and dendritic cells, but not expressed in most normal tissues (at protein level). Widely expressed, including in kidney, liver, lung, ovary, placenta, spleen and testis.
**Function**: Negatively regulates T-cell-mediated immune response by inhibiting T-cell activation, proliferation, cytokine production and development of cytotoxicity. When expressed on the cell surface of tumor macrophages, plays an important role, together with regulatory T-cells (Treg), in the suppression of tumor-associated antigen-specific T-cell immunity. Involved in promoting epithelial cell transformation.
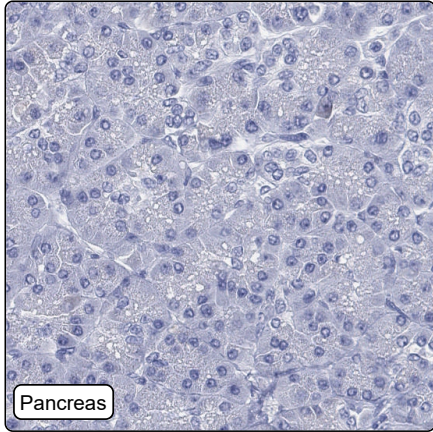**Subcellular location**:
Cell membrane (*match to sequence model*) (Topo: Single-pass type I membrane protein (*curator inference*))
*NOTE*: Expressed at the cell surface. A soluble form has also been detected.
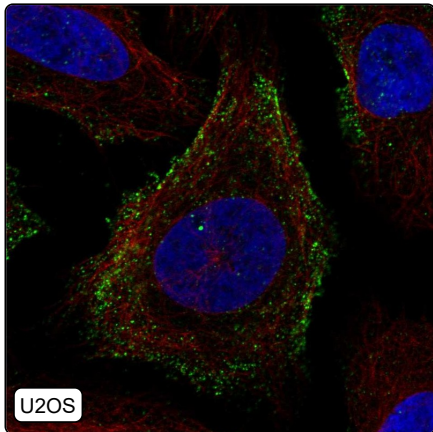**Protein existence**: Experimental evidence at protein level
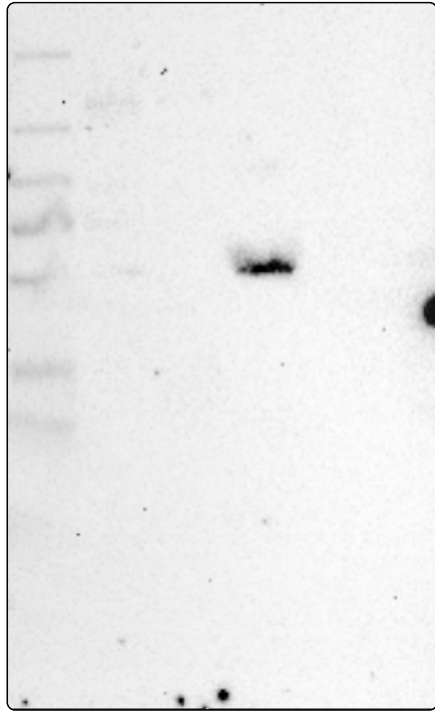
**Comment:**

## Immunohistochemistry


Pancreas

| IHC protocol: | HIER pH6, Dilution 1:300 |
|---|---|
| IHC test staining: | No positivity was observed. |
| 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: | Tissue enhanced (breast,fallopian tube,pancreas) |
| RNA tissue distribution: | Detected in many |
| IHC Sibling similarity: | Other antibody shows dissimilar IHC staining pattern |

## Immunofluorescence


U2OS

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

# 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): | 10, 18, 21, 31, 31 |
| WB Validation: | Uncertain (Only bands not corresponding to the predicted size.) |

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