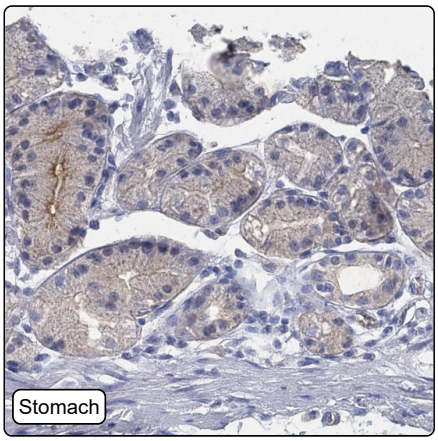
# CPTC-FSCN1-1 (CAB080327)

**Uniprot ID**: Q16658
**Protein name**: FSCN1_HUMAN
**Full name**: Fascin
**Tissue specificity**: Ubiquitous.
**Function**: Actin-binding protein that contains 2 major actin binding sites (PubMed:21685497, PubMed:23184945). Organizes filamentous actin into parallel bundles (PubMed:20393565, PubMed:21685497, PubMed:23184945). Plays a role in the organization of actin filament bundles and the formation of microspikes, membrane ruffles, and stress fibers (PubMed:22155786). Important for the formation of a diverse set of cell protrusions, such as filopodia, and for cell motility and migration (PubMed:20393565, PubMed:21685497, PubMed:23184945). Mediates reorganization of the actin cytoskeleton and axon growth cone collapse in response to NGF (PubMed:22155786).
**Subcellular location**:
Cytoplasm > Cytosol (*experimental evidence*)
Cytoplasm > Cell cortex (*experimental evidence*)
Cytoplasm > Cytoskeleton (*experimental evidence*)
Cytoplasm > Cytoskeleton > Stress fiber (*experimental evidence*)
Cell projection > Filopodium (*experimental evidence*)
Cell projection > Invadopodium (*experimental evidence*)
Cell projection > Microvillus (*experimental evidence*)
Cell junction (*experimental evidence*)
*NOTE*: Colocalized with RUFY3 and F-actin at filipodia of the axonal growth cone. Colocalized with DBN1 and F-actin at the transitional domain of the axonal growth cone (By similarity).
**Protein existence**: Experimental evidence at protein level

**Comment:**

## Immunohistochemistry

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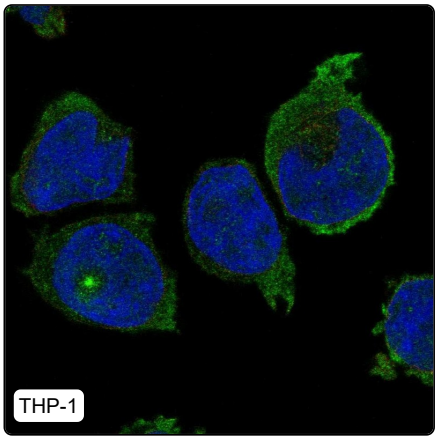
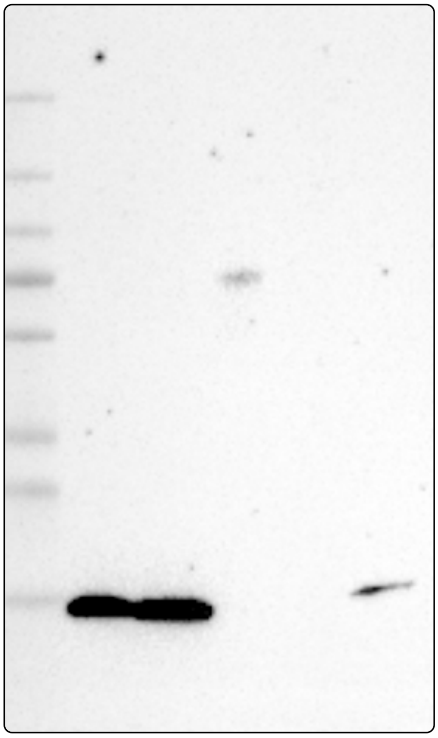
| **IHC protocol:** | HIER pH6, Dilution 1:325 |
| **IHC test staining:** | Cytoplasmic and membranous positivity in GI and CNS. |
| **Literature conformance:** | Not consistent with gene/protein characterization data |
| **Literature significance:** | |
| **RNA similarity:** | Very low consistency between antibody staining and RNA expression data |
| **RNA tissue specificity:** | Low tissue specificity |
| **RNA tissue distribution:** | Detected in many |
| **IHC Sibling similarity:** | Other antibody shows dissimilar IHC staining pattern |

## Immunofluorescence




| | |
|---|---|
| **IF Overlay:** | antibody (green), anti-tubulin (red) and DAPI (blue) |
| **IF main location:** | Plasma membrane - 12: **Uncertain** (auto)<br>Cytosol - 3: **Supportive** (auto)<br>Centriolar satellite - 12: **Uncertain** (auto) |
| **IF additional location:** | |
| **IF approved for publication on HPA:** | Yes |
| **IF in THP-1:** | Plasma membrane<br>Centriolar satellites |
| **IF in U2OS:** | Cytosol |

# 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):** | 14, 15, 15, 55 |
| **WB Validation:** | Supported (Band of predicted size in kDa (+/-20%) with additional bands present.) |