

**ROBO1 Antibody (Internal)**  
**Goat Polyclonal Antibody**  
**Catalog # ALS12611**

**Specification**

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**ROBO1 Antibody (Internal) - Product Information**

Application	IHC
Primary Accession	<a href="#">O9Y6N7</a>
Reactivity	Human, Mouse, Rat, Hamster, Monkey, Pig, Chicken, Horse, Xenopus, Bovine, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	181kDa KDa

**ROBO1 Antibody (Internal) - Additional Information**

**Gene ID** 6091

**Other Names**

Roundabout homolog 1, Deleted in U twenty twenty, H-Robo-1, ROBO1, DUTT1

**Target/Specificity**

Human ROBO1. This antibody is expected to recognise all reported isoforms (NP\_002932.1; NP\_598334.1; NP\_001139316.1; NP\_001139317.1).

**Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

**Precautions**

ROBO1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**ROBO1 Antibody (Internal) - Protein Information**

**Name** ROBO1

**Synonyms** DUTT1

**Function**

Receptor for SLIT1 and SLIT2 that mediates cellular responses to molecular guidance cues in cellular migration, including axonal navigation at the ventral midline of the neural tube and projection of axons to different regions during neuronal development (PubMed:[10102268](http://www.uniprot.org/citations/10102268), PubMed:[24560577](http://www.uniprot.org/citations/24560577)). Interaction with the intracellular domain of FLRT3 mediates axon attraction towards cells expressing NTN1 (PubMed:[24560577](http://www.uniprot.org/citations/24560577)). In axon growth cones, the silencing of the attractive effect of NTN1 by SLIT2 may require the formation of a ROBO1-DCC complex (By similarity). Plays a role in the regulation of cell migration

via its interaction with MYO9B; inhibits MYO9B-mediated stimulation of RHOA GTPase activity, and thereby leads to increased levels of active, GTP-bound RHOA (PubMed:<a href="http://www.uniprot.org/citations/26529257" target="\_blank">26529257</a>). May be required for lung development (By similarity).

#### Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:O89026}. Endoplasmic reticulum-Golgi intermediate compartment membrane {ECO:0000250|UniProtKB:O55005}; Single-pass membrane protein {ECO:0000250|UniProtKB:O55005} Note=Detected at growth cones in thalamus neurons. Detected at growth cones in thalamus neurons (By similarity). PRRG4 prevents cell surface location and both colocalize in the Endoplasmic reticulum/Golgi adjacent to the cell nucleus (By similarity) {ECO:0000250|UniProtKB:O55005, ECO:0000250|UniProtKB:O89026}

#### Tissue Location

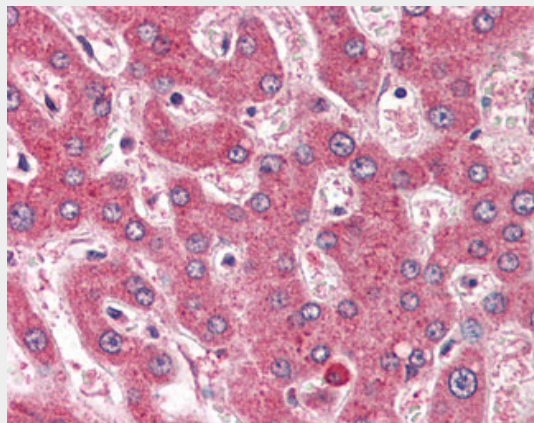
Widely expressed, with exception of kidney.

### ROBO1 Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### ROBO1 Antibody (Internal) - Images



Anti-ROBO1 antibody IHC of human liver.

### ROBO1 Antibody (Internal) - Background

Receptor for SLIT1 and SLIT2 which are thought to act as molecular guidance cue in cellular migration, including axonal navigation at the ventral midline of the neural tube and projection of axons to different regions during neuronal development. In axon growth cones, the silencing of the attractive effect of NTN1 by SLIT2 may require the formation of a ROBO1-DCC complex. May be required for lung development.

**ROBO1 Antibody (Internal) - References**

Kidd T.,et al.Cell 92:205-215(1998).

Muzny D.M.,et al.Nature 440:1194-1198(2006).

Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Bechtel S.,et al.BMC Genomics 8:399-399(2007).

Brose K.,et al.Cell 96:795-806(1999).