ROBO1 Antibody (C-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21950b

Specification

ROBO1 Antibody (C-Term) - Product Information

Application	**WB,E**
Primary Accession	[Q9Y6N7](Q9Y6N7)
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**180930**

ROBO1 Antibody (C-Term) - Additional Information

Gene ID 6091

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

Target/Specificity
This ROBO1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1097-1130 amino acids from human ROBO1.

Dilution
WB~~1:1000-1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ROBO1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

ROBO1 Antibody (C-Term) - 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, PubMed:24560577). Interaction with the intracellular domain of FLRT3 mediates axon attraction towards cells expressing NTN1 (PubMed: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:26529257). 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}
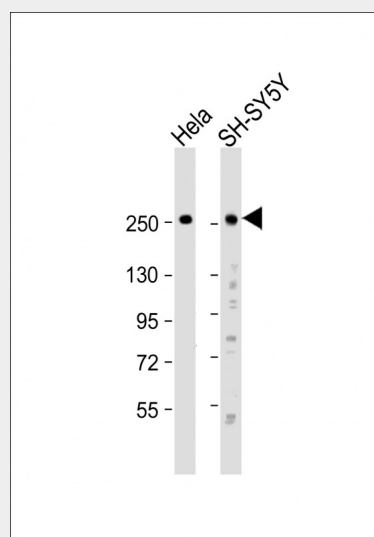
Tissue Location
Widely expressed, with exception of kidney.

ROBO1 Antibody (C-Term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ROBO1 Antibody (C-Term) - Images

All lanes : Anti-ROBO1 Antibody (C-Term) at 1:1000-1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: SH-SY5Y whole cell lysate Lysates/proteins at 20 μg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 181 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ROBO1 Antibody (C-Term) - 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 (C-Term) - 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).