

#### OriGene Technologies, Inc.

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# Product datasheet for TA397428S

### **ROBO1 Rabbit Polyclonal Antibody**

### **Product data:**

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	WB: 1:500 - 1:3,000 IHC: 2 μg/ml to 10 μg/ml IF: User Optimized ELISA: 1:30,000 - 1:160,000
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an C-Terminal region near amino acids 1625-1650 of Human ROBO-1.
Specificity:	This affinity purified antibody is directed against human ROBO-1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, mouse, rat and dog sources based on 100% homology for the immunogen sequence. Cross reactivity will occur with all isoforms of ROBO-1. Cross reactivity with ROBO-1 homologues from other sources has not been determined.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.0 mg/mL - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 $\mu$ L). To minimize loss of volume dilute 1:10 by adding 225 $\mu$ L of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.
Gene Name:	roundabout guidance receptor 1



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	ROBO1 Rabbit Polyclonal Antibody – TA397428S
Database Link:	<u>Entrez Gene 6091 Human</u> <u>Q2M1J3</u>
Background:	ROBO-1 (also called Roundabout homolog 1 precursor and Deleted in U twenty twenty (DUTT)) functions as a receptor for SLIT1 and SLIT2. The SLIT proteins are thought to act as a 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. ROBO-1 may also be required for lung development. ROBO-1 is a type I membrane protein. ROBO-1 is a widely expressed protein with the exception of the kidney. Defects in ROBO1 may be a cause of breast and lung cancer. ROBO-1 maps within a region of overlapping homozygous deletions characterized in both small cell lung cancer cell lines (SCLC) and in a breast cancer cell line. Multiple splice variants have been identified for this protein.
Synonyms:	rabbit anti-ROBO1 antibody, ROBO 1, ROBO-1, hROBO-1, Roundabout homolog 1, Deleted in U twenty twenty, DUTT1, DUTT-1
Note:	This affinity purified antibody has been tested for use in ELISA, western blot, and immunohistochemistry. It may be suitable for immunofluorescence and IP. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~181 kDa in size corresponding to ROBO-1 by western blotting in the appropriate cell lysate or extract.

## **Product images:**



Rockland's Affinity Purified anti-ROBO1 antibody was used at a concentration of 5 µg/ml to detect ROBO1 in a variety of tissues including multihuman, multi-brain and multi-cancer slides. This image shows staining of human brain tissue. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.

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