

**Anti-SLIT-1 (RABBIT) Antibody**  
**Slit1 Antibody**  
**Catalog # ASR5302****Specification**

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**Anti-SLIT-1 (RABBIT) Antibody - Product Information**

Host	<b>Rabbit</b>
Conjugate	<b>Unconjugated</b>
Target Species	<b>Mouse</b>
Reactivity	<b>Rat, Mouse</b>
Clonality	<b>Polyclonal</b>
Application	<b>WB, E, I, LCI</b>
Application Note	<b>This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect multiple bands corresponding to cleavage products of SLIT-1 by western blotting in the appropriate cell lysate or extract.</b>
Physical State	<b>Liquid (sterile filtered)</b>
Buffer	<b>0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2</b>
Immunogen	<b>This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 485-515 of mouse SLIT-1 protein.</b>
Preservative	<b>0.01% (w/v) Sodium Azide</b>

**Anti-SLIT-1 (RABBIT) Antibody - Additional Information****Gene ID** 20562**Other Names**  
20562**Purity**

This affinity purified antibody is directed against mouse SLIT-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 mouse and rat based on 100% homology for the immunogen sequence. Expect cross reactivity with SLIT-1 from human, chicken and frog sources, as only a single amino acid residue change is found within the immunogen sequence (94% positive by BLAST). Cross reactivity with SLIT-1 homologues from other sources has not been determined.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

#### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

### Anti-SLIT-1 (RABBIT) Antibody - Protein Information

**Name** Slit1

**Synonyms** Kiaa0813

#### Function

Thought to act as molecular guidance cue in cellular migration, and function appears to be mediated by interaction with roundabout homolog receptors. During neural development involved in axonal navigation at the ventral midline of the neural tube and projection of axons to different regions (By similarity). SLIT1 and SLIT2 together seem to be essential for midline guidance in the forebrain by acting as repulsive signal preventing inappropriate midline crossing by axons projecting from the olfactory bulb.

#### Cellular Location

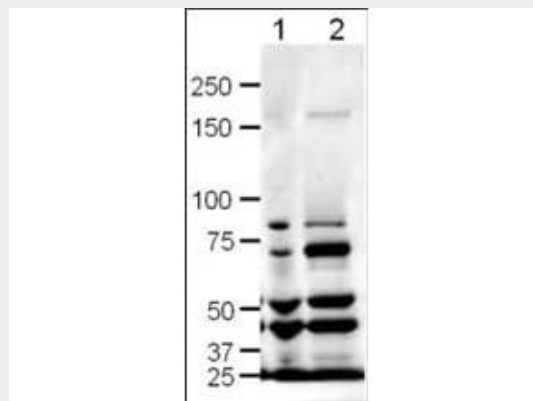
Secreted.

### Anti-SLIT-1 (RABBIT) Antibody - 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](#)

### Anti-SLIT-1 (RABBIT) Antibody - Images



Western blot using Rockland's Affinity Purified anti-SLIT-1 antibody shows detection of SLIT-1 in rat (lane 1) and mouse (lane 2) brain lysates. The expected molecular weight for SLIT-1 is 168

kDa. Approximately 20  $\mu$ g of each lysates was run on a SDS-PAGE and transferred onto nitrocellulose followed by reaction with a 1:500 dilution of anti-SLIT-1 antibody. Signal was detected using standard techniques. Note: The smaller strong bands observed in this blot are likely SLIT-1 cleavage products. A number of cleavage products for both Slit1 and Slit2 are reported in the literature resulting from alternate splicing and range from ~40kDa -160kDa (see Little et al, 2002 for additional details).

#### **Anti-SLIT-1 (RABBIT) Antibody - Background**

SLIT-1 (also known as KIAA0813, MEGF4, multiple epidermal growth factor-like domains 4 and Slit homolog 1 protein) is a Slit protein. This protein is a ligand for the Roundabout (Robo) receptors and acts as guidance cues in axonal migration/navigation during neural development, at the ventral midline of the neural tube. Slit1 and Slit2 are essential for midline guidance in the forebrain by acting as repulsive signals preventing inappropriate midline crossing by axons projecting from the olfactory bulb. Each SLIT gene encodes a putative secreted protein, which contains conserved protein-protein interaction domains including leucine-rich repeats and epidermal growth factor-like motifs, similar to those of the *Drosophila* protein. In situ hybridization studies indicated that the rat SLIT-1 mRNA was specifically expressed in the neurons of fetal and adult forebrains. This data suggests that the SLIT genes form an evolutionarily conserved group in vertebrates and invertebrates, and that the mammalian SLIT proteins may participate in the formation and maintenance of the nervous and endocrine systems by protein-protein interactions. Alternative splicing isoforms have been identified for Slit1 protein.