

Slit1 (N-14): sc-31590

BACKGROUND

Secreted leucine-rich repeat-containing proteins 1-3 (Slit1-3) are secreted glycoproteins that influence axonal guidance and mediate normal neural development by acting as high-affinity signaling ligands for the repulsive guidance receptor, Roundabout (robo). Within the developing central nervous system (CNS) of different vertebrate systems, Slit proteins are expressed in equivalent regions, suggesting a conserved function among vertebrate homologs. Slit is expressed in the midline of the central nervous system in both vertebrates and invertebrates, where it functions as a regulatory factor of mesodermal cell movement during gastrulation. Slit2 is a short range inhibitory guidance cue for retinal ganglion cell (RGC) axons that may mediate spatial progression of RGCs.

REFERENCES

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- Brose, K., et al. 1999. Slit proteins bind robo receptors and have an evolutionarily conserved role in repulsive axon guidance. *Cell* 96: 795-806.
- Hu, H. 1999. Chemorepulsion of neuronal migration by Slit2 in the developing mammalian forebrain. *Neuron* 23: 703-711.
- Yuan, W., et al. 1999. The mouse Slit family: secreted ligands for Robo expressed in patterns that suggest a role in morphogenesis and axon guidance. *Dev. Biol.* 212: 290-306.
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CHROMOSOMAL LOCATION

Genetic locus: SLIT1 (human) mapping to 10q24.1; Slit1 (mouse) mapping to 19 C3.

SOURCE

Slit1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Slit1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31590 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Slit1 (N-14) is recommended for detection of Slit1 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Slit1 (N-14) is also recommended for detection of Slit1 isoforms 1 and 2 in additional species, including canine.

Suitable for use as control antibody for Slit1 siRNA (h): sc-42256, Slit1 siRNA (m): sc-42257, Slit1 shRNA Plasmid (h): sc-42256-SH, Slit1 shRNA Plasmid (m): sc-42257-SH, Slit1 shRNA (h) Lentiviral Particles: sc-42256-V and Slit1 shRNA (m) Lentiviral Particles: sc-42257-V.

Molecular Weight of Slit1: 168 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.