



Rabbit Anti-SLIT2 antibody

SL2743R

Product Name:	SLIT2
Chinese Name:	神经迁移蛋白Slit2/3抗体
Alias:	Drad-1; E030015M03Rik; E130320P19Rik; FLJ14420; Slil 3; Sli13; Slit 2; Slit homolog 2 (Drosophila); Slit homolog 2; Slit homolog 2 protein. Drad 1; OTTHUMP00000158695; OTTHUMP00000217852; OTTHUMP00000217853; OTTHUMP00000217854; Slit homolog 2 protein C-product; Slit-2; Slit2; SLIT2_HUMAN
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	170kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Slit2:451-550/1529
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Slit proteins are ligands at the Roundabout (Robo) receptors and act 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. A number of cleavage products are reported in the literature for Slit2 proteins (following alternate splicing). The C-terminal cleavage proteins are more diffusible than the larger N-terminal protein that is more tightly cell associated. Slit2 protein is expressed in fetal lung and kidney, and adult spinal cord. Weak expression in adult adrenal gland, thyroid, trachea.

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. SLIT1 and SLIT2 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. In spinal chord development may play a role in guiding commissural axons once they reached the floor plate by modulating the response to netrin. In vitro, silences the attractive effect of NTN1 but not its growth-stimulatory effect and silencing requires the formation of a ROBO1-DCC complex. May be implicated in spinal chord midline post-crossing axon repulsion. In vitro, only commissural axons that crossed the midline responded to SLIT2. In the developing visual system appears to function as repellent for retinal ganglion axons by providing a repulsion that directs these axons along their appropriate paths prior to, and after passage through, the optic chiasm. In vitro, collapses and repels retinal ganglion cell growth cones. Seems to play a role in branching and arborization of CNS sensory axons, and in neuronal cell migration. In vitro, Slit homolog 2 protein N-product, but not Slit homolog 2 protein C-product, repels olfactory bulb (OB) but not dorsal root ganglia (DRG) axons, induces OB growth cones collapse and induces branching of DRG axons. Seems to be involved in regulating leukocyte migration.

Subcellular Location:

Secreted. The C-terminal cleavage protein is more diffusible than the larger N-terminal protein that is more tightly cell associated.

Tissue Specificity:

Fetal lung and kidney, and adult spinal cord. Weak expression in adult adrenal gland, thyroid, trachea and other tissues examined.

Similarity:

Contains 1 CTCK (C-terminal cystine knot-like) domain.

Contains 7 EGF-like domains.

Contains 1 laminin G-like domain.

Contains 20 LRR (leucine-rich) repeats.

Contains 4 LRRCT domains.

Contains 4 LRRNT domains.

SWISS:

O94813

Gene ID:
9353

Database links:

[Entrez Gene: 9353](#)Human

[Entrez Gene: 20563](#)Mouse

[Entrez Gene: 360272](#)Rat

[Omim: 603746](#)Human

[SwissProt: O94813](#)Human

[SwissProt: Q9R1B9](#)Mouse

[SwissProt: Q9WVC1](#)Rat

[Unigene: 29802](#)Human

[Unigene: 289739](#)Mouse

[Unigene: 146652](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.