

Active Recombinant Mouse Slit2, His-tagged

Cat. No. Slit2-20M Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Slit2, expressed in CHO.
Species	Mouse
Source	CHO
Description	Slit2 is a member of the Slit family of large secreted axon guidance molecules that share 65-70% amino acid (aa) identity and are ligands for Robo receptors. Similar to other mammalian family members, the 1521 aa, ~200 kDa Slit2 contains a 25 aa signal sequence followed by four groups of leucine-rich repeats (22 LRR total), 9 EGF-like sequences and a C-terminal cysteine-rich domain. An ALPS (agrin laminin perlecan slit) domain is found between EGF6 and EGF7. A proteolytic cleavage site centigrade-curves between EGF5 and EGF6. A membrane-associated centigrade-cleavage site just N-terminal to the cleavage site, creates a membrane-bound ~140 kDa N-terminal cleavage product (Slit2 N) that has chemorepellent activity. Heparin sulfate is required for interaction of Robo with Slit LRR domains. Mature mouse Slit2 shares 98, 97, 97, 97 and 95% aa identity with rat, human, bovine, equine and canine Slit2.
Form	Lyophilized from a 0.2 µm filtered solution in PBS.
Bio-activity	Measured by its ability to enhance neurite outgrowth of dissociated E13 chick embryonic dorsal root ganglia (DRG) neurons. rmSlit2 immobilized at 3-12 µg/mL, is able to significantly induce neurite outgrowth.
Molecular Mass	Predicted Molecular Mass: 99.7 kDa. SDS PAGE: 105-115 kDa, reducing conditions

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Endotoxin	<1.0 eu per 1 µg of the protein by the lal</1.0
Purity	>97%, by SDSPAGE under reducing conditions and visualized by silver stain.
Usage	FOR RESEARCH USE ONLY
Quality Control Test	12 months from date of receipt, 20 to 70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, 20 to 70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 100 µg/mL in sterile PBS.
Warning	Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	Slit2 slit homolog 2 (Drosophila) [Mus musculus]
Official Symbol	Slit2
Synonyms	SLIT2; slit homolog 2 (Drosophila); slit homolog 2 protein; slit-2; neurogenic extracellular slit protein; downregulated during adipocyte differentiation-1; Slil3; Drad-1; mKIAA4141; E030015M03Rik; E130320P19Rik; KIAA4141;
Gene ID	20563
mRNA Refseq	NM_178804
Protein Refseq	NP_848919
Chromosome	5 B3; 5

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Location	
Pathway	Activation of Rac, organism-specific biosystem; Axon guidance, organism-specific biosystem; Axon guidance, conserved biosystem; Axon guidance, organism-specific biosystem; Developmental Biology, organism-specific biosystem; Inactivation of Cdc42 and Rac, organism-specific biosystem; Netrin-1 signaling, organism-specific biosystem;
Function	GTPase inhibitor activity; Roundabout binding; calcium ion binding; chemorepellent activity; heparan sulfate proteoglycan binding; heparin binding; laminin-1 binding; protein homodimerization activity; proteoglycan binding; receptor binding;

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