

## Active Recombinant Mouse Slit2, His-tagged

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

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Mouse Slit2, expressed in CHO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>           | CHO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Description</b>      | <p>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.</p> |
| <b>Form</b>             | Lyophilized from a 0.2 µm filtered solution in PBS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Bio-activity</b>     | <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Molecular Mass</b>   | Predicted Molecular Mass: 99.7 kDa. SDS PAGE: 105-115 kDa, reducing conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                             |                                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Endotoxin</b>            | <1.0 eu per 1 µg of the protein by the lal</1.0                                                                                                                                                                         |
| <b>Purity</b>               | >97%, by SDSPAGE under reducing conditions and visualized by silver stain.                                                                                                                                              |
| <b>Usage</b>                | FOR RESEARCH USE ONLY                                                                                                                                                                                                   |
| <b>Quality Control Test</b> | 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. |
| <b>Reconstitution</b>       | Reconstitute at 100 µg/mL in sterile PBS.                                                                                                                                                                               |
| <b>Warning</b>              | Avoid repeated freeze-thaw cycles.                                                                                                                                                                                      |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Slit2 slit homolog 2 (Drosophila) [ Mus musculus ]                                                                                                                                                                             |
| <b>Official Symbol</b> | Slit2                                                                                                                                                                                                                          |
| <b>Synonyms</b>        | 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; |
| <b>Gene ID</b>         | 20563                                                                                                                                                                                                                          |
| <b>mRNA Refseq</b>     | NM_178804                                                                                                                                                                                                                      |
| <b>Protein Refseq</b>  | NP_848919                                                                                                                                                                                                                      |
| <b>Chromosome</b>      | 5 B3; 5                                                                                                                                                                                                                        |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

| 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;                                                                                            |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA