

Recombinant human Slit2 protein ab82131

3 References

Description

Product name	Recombinant human Slit2 protein
Biological activity	Determined by its ability to inhibit MC3T3/E1 osteoblasts cell differentiation.
Purity	> 98 % SDS-PAGE. Purity is greater than 98% by SDS-PAGE gel and HPLC analyses.
Expression system	HEK 293 cells
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	

ACPAQCSCSG STVDCHGLAL RSVPRNIPRN  
TERLDLNGNN ITRITKTDFA GLRHLRVLQL MENKISTIER  
GAFQDLKELE RLRLNRNHLQ LFPELLFLGT  
AKLYRLDLSE NQQAIPRKA FRGAVDIKNL QLDYNQISCI  
EDGAFRALRD LEVLTLNNNN ITRLSVASFN  
HMPKLRTFRL HSNLYCDCH LAWLSDWLRQ  
RPRVGLYTQC MGPSHLRGHN VAEVQKREFV  
CSGHQSFMAP SCSVLHCPAA CTCSNNMDC  
RGKGLTEIPT NLPETITEIR LEQNTIKVIP PGAFSPYKKL  
RRIDLSNNQI SELAPDAFQG LRSLNSLVLY GNKITELPKS  
LFEGFLSLQL LLLNANKINC LRVDAFQDLH NLNLLSLYDN  
KLQTIAGTF SPLRAIQTMH LAQNPFICDC HLKWLADYLH  
TNPIETSGAR CTSPRRLANK RIGQIKSKKF RCSAKEQYFI  
PGTEDYRSKL SGDCFADLAC PEKCRCEGTT  
VDCSNQKLNK IPEHIPQYTA ELRLNNNEFT VLEATGIFKK  
LPQLRKINFs NNKITDIEEG AFEGASGVNE ILLTSNRLEN  
VQHkMFkGLE SLKTLMLRSN RITCVGNDSF  
IGLSSVRLLS LYDNQITTVA PGAFDTLHSL STLNLLANPF  
NCNCYLAWLG EWLKRRKRVt GNPRCQKPfY  
LKEIPIQDVA IQDFTCDDGN DDNSCSPLSR  
CPTECTCLDT VVRCsNKGLK VLPKGIPRDV  
TELYLDGNQF TLVPKELSny KHLTLIDLSN NRISTLSNQs  
FSNMTQLLTL ILSYNRLRCI PPRTFDGLKS LRLLSLHGND  
ISVVPEGAFN DLSALSHLAI GANPLYCDCN

MQWLSDWVKS EYKEPGIARC AGPGEMADKL  
 LLTPSKKFT CQGPVDVNIL AKCNPCLSNP  
 CKNDGTCNSD PVDFYRCTCP YGFKGQDCDV  
 PIHACISNPC KHGGTCHLKE GEEDGFWCIC  
 ADGFEGENCE VNVDDCEDND CENNSTCVDG  
 INNYTCLCPP EYTGELCEEK LDFCAQDLNP  
 CQHDSKCILT PKGFKDCTP GYVGEHCDID  
 FDDCQDNKCK NGAHCTDAVN GYTCICPEGY  
 SGLFCEFSPP MV

**Amino acids** 27 to 1118

## Specifications

Our **Abpromise guarantee** covers the use of **ab82131** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

**Form** Lyophilized

## Preparation and Storage

**Stability and Storage** Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.  
 This product is an active protein and may elicit a biological response in vivo, handle with caution.

**Reconstitution** For lot specific reconstitution information please contact our Scientific Support Team.

## General Info

**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.

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

**Sequence similarities** 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.

**Domain**

The leucine-rich repeat domain is sufficient for guiding both axon projection and neuronal migration, in vitro.

**Cellular localization**

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

---

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

**Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

**Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors