

Datasheet for ABIN3116732  
**SEMA6D Protein (AA 21-1073) (rho-1D4 tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	SEMA6D
Protein Characteristics:	AA 21-1073
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SEMA6D protein is labelled with rho-1D4 tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	VSPEDDEPL NTVDYHYSRQ YPVFRGRPSG NESQHRLDFQ LMLKIRDTLY IAGRDQVYTV NLNEMPKTEV IPNKKLTWRS RQQDRENCAM KGKHKDECHN FIKVFVPRND EMVFVCGTNA FNPMCRYRRL STLEYDGEEI SGLARCPFDA RQTNVALFAD GKLYSATVAD FLASDAVIYR SMGDGSALRT IKYDSKWIKE PHFLHAIEYG NYVYFFFREI AVEHNNLGKA VYSRVARICK NDMGGSQRVL EKHWTSFLKA RLNCSPVGDS FFYFDVLQSI TDIIQINGIP TVVGVFTTQL NSIPGSAVCA FSMDDIEKVF KGRFKEQKTP DSVWTAVPED KVPKPRPGCC AKHGLAEAYK TSIDFPDETL SFIKSHPLMD SAVPPIADEP WFTKTRVRYR LTAISVDHSA GPYQNYTVIF VGSEAGMVLK VLAKTSPFSL NDSVLLEEIE AYNHAKCSAE NEEDKKVISL QLDKDHHALY VAFSSCIIRI PLSRCERYGS CKKSCIASRD PYCGWLSQGS CGRVTPGMLA EGYEQDTEFG NTAHLGDCHE ILPTSTTPDY KIFGGPTSDM EVSSSVTTM ASIPEITPKV IDTWRPKLTS SRKFVVQDDP NTSDFTDPLS GIPKGVREWEV QSGESNQMVH MNVLITCVFA AFVLGAFIAG VAVYCYRDMF VRKNRKIHKD AESAQSCTDS SGSEAKLNGL FDSPVKEYQQ NIDSPKLYSN
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LLTSRKELPP NGDTKSMVMD HRGQPPELAA LPTPESTPVL HQKTLQAMKS HSEKAHGHGA  
SRKETPQFFP SSPPPHSPLS HGHIPSAIVL PNATHDYNTS FSNSNAHKAE KKLQNIDHPL  
TKSSSKRDHR RSVDSRNTLN DLLKHLNDPN SNPKAIMGDI QMAHQNLMLD PMGSMSEVPP  
KVPNREASLY SPPSTLPRNS PTKRVDVPTT PGVPMTSLER QRGYHKNSSQ RHSISAMPKN  
LNSPNGVLLS RQPSMNRGGY MPTPTGAKVD YIQGTPVSVH LQPSLSRQSS YTSNGTLPRT  
GLKRTPSLKP DVPPKPSFVP QTPSVRPLNK YTY

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human SEMA6D Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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### Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractionated by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate

## Product Details

fractions are analyzed by Western blot.

3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

## Target Details

Target: SEMA6D

Alternative Name: SEMA6D ([SEMA6D Products](#))

Background: Shows growth cone collapsing activity on dorsal root ganglion (DRG) neurons in vitro. May be a stop signal for the DRG neurons in their target areas, and possibly also for other neurons. May also be involved in the maintenance and remodeling of neuronal connections.

Molecular Weight: 118.7 kDa Including tag.

UniProt: [Q8NFY4](#)

Pathways: [Smooth Muscle Cell Migration](#)

## Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

## Handling

Format: Liquid

## Handling

Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process