

# Recombinant Mouse SEMA4A protein (Fc Chimera) ab214826

### Description

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**Product name** Recombinant Mouse SEMA4A protein (Fc Chimera)

**Purity** >= 98 % SDS-PAGE.

**Endotoxin level** < 0.060 Eu/μg

**Expression system** CHO cells

**Accession** [Q62178](#)

**Protein length** Protein fragment

**Animal free** No

**Nature** Recombinant

**Species** Mouse

**Sequence**

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MALPSLGQDSWSLLRVFFFQLFLLPSLPPASGTGGQGPM
PRVKYHAGDGH
RALSFFQQKGLRDFDTLLSDDGNTLYVGAREAVLALNIQ
NPGIPRLKNM
IPWPASERKKTECAFKKKSNETQCFNFIRVLVSYNATHLYA
CGTFAFSPA
CTFIELQDSLLLPIIDKVMGKGQSPFDPVHKHTAVLVDG
MLYSGTMNN
FLGSEPILMRTLGSQPVLKTDIFLRWLHADASFVAAIPSTQ
VYFFFEET
ASEFDFFEELYISRVAQVCKNDVGGEKLLQKKWTTFLKA
QLLCAQPGQLP
FNIRHAVLLPADSPSVSRIVFTSQWQVGGTRSSAVCAF
SLTDIERVF
KGKYKELNKETSRWTTYRGSEVSPRPGSCSMGPSSDKA
LTFMKDHFLMDE
HVVGTPLLVKSGVEYTRLAVESARGLDGSSHVVMYLGTS
TGSLHKAVVPQ
DSSAYLVEEIQSPDSEPVRLQLAPAQGAVFAGFSGGIW
RVPRANCSVY
ESCVDCVLARDPHCAWDPE SRLCSLLSGSTKPWKQDM
ERGNPEWVCTRGP
MARSPRRQSPPLIKEVLTVPNSILELPCPHLSALASYHW
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SHGRAKISEA  
SATVYNGSLLLLQDGVGGLYQCVATENGYSYPVVSYYW  
DSQDQPLALDP ELAGVPRERVQVPLTRVGGGASMAAQ

**Amino acids** 1 to 676

**Additional sequence information** Fused to the N-terminus of the Fc region of Human IgG1.

## Specifications

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Our **Abpromise guarantee** covers the use of **ab214826** 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

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**Stability and Storage** Shipped at 4°C. Store at -20°C long term. Avoid freeze / thaw cycle.  
Constituent: 100% PBS

**Reconstitution** Reconstitute at 100 µg/mL in sterile PBS. Working aliquots are stable for up to 3 months when stored at -20°C.

## General Info

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**Function** Inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons.

**Involvement in disease** Defects in SEMA4A are the cause of retinitis pigmentosa type 35 (RP35) [MIM:610282]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.  
Defects in SEMA4A are the cause of cone-rod dystrophy type 10 (CORD10) [MIM:610283]. CORDs are inherited retinal dystrophies belonging to the group of pigmentary retinopathies. CORDs are characterized by retinal pigment deposits visible on fundus examination, predominantly in the macular region, and initial loss of cone photoreceptors followed by rod degeneration. This leads to decreased visual acuity and sensitivity in the central visual field, followed by loss of peripheral vision. Severe loss of vision occurs earlier than in retinitis pigmentosa.

**Sequence similarities** Belongs to the semaphorin family.  
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.  
Contains 1 PSI domain.  
Contains 1 Sema domain.

**Cellular localization** Membrane.

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

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