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Datasheet for ABIN7317489
Sema4a Protein (His tag)

Overview

Quantity:	100 µg
Target:	Sema4a
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Sema4a protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human SEMA4A/Semaphorin B Protein (His Tag)(Active)
Sequence:	Met 1-His 683
Characteristics:	A DNA sequence encoding the human SEMA4A (NP_071762.2) extracellular domain (Met 1-His 683) was expressed, with a polyhistidine tag at the C-terminus.
Purity:	> 96 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to bind biotinylated mouse SEMA4D in a functional ELISA.

Target Details

Target:	Sema4a
Alternative Name:	SEMA4A/Semaphorin B (Sema4a Products)

Target Details

Background:	<p>Background: Semaphorin-4A; also known as Semaphorin-B; SEMA4A; Sema B and SEMAB; is a single-pass type I membrane protein which belongs to the semaphorin family. It inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons. Semaphorin-4A / SEMA4A contains one Ig-like C2-type (immunoglobulin-like) domain; one PSI domain and one Sema domain. Defects in SEMA4A are the cause of retinitis pigmentosa type 35 (RP35) which 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 also the cause of cone-rod dystrophy type 10 (CORD10) which 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. Semaphorins are secreted; transmembrane; and GPI-linked proteins; defined by cysteine-rich semaphorin protein domains; that have important roles in a variety of tissues. Humans have 20 semaphorins; Drosophila has five; and two are known from DNA viruses. Semaphorins are found in nematodes and crustaceans but not in non-animals. They are grouped into eight classes on the basis of phylogenetic tree analyses and the presence of additional protein motifs. Semaphorins have been implicated in diverse developmental processes such as axon guidance during nervous system development and regulation of cell migration.</p> <p>Synonym: CORD10;RP35;SEMAB;SEMB</p>
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Molecular Weight:	73.4 kDa
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NCBI Accession:	NP_071762
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Reconstitution:	Please refer to the printed manual for detailed information.
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Buffer:	Lyophilized from sterile PBS, pH 7.4
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted
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samples are stable at < -20°C for 3 months.