

Human Semaphorin 4A/SEMA4A Protein

Cat. No. SEM-HM14A

Description

Source	Recombinant Human Semaphorin 4A/SEMA4A Protein is expressed from HEK293 with His tag at the C-terminus. It contains Gly33-His683.
Accession	Q9H3S1-1
Molecular Weight	The protein has a predicted MW of 73.5 kDa. Due to glycosylation, the protein migrates to 85-95 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage

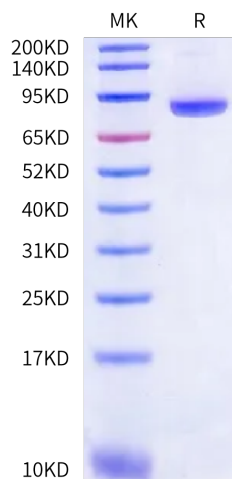
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Neuroimmune semaphorin 4A (Sema4A), a member of semaphorin family of transmembrane and secreted proteins, is an important regulator of neuronal and immune functions. In the nervous system, Sema4A primarily regulates the functional activity of neurons serving as an axon guidance molecule. In the immune system, Sema4A regulates immune cell activation and function, instructing a fine tuning of the immune response.

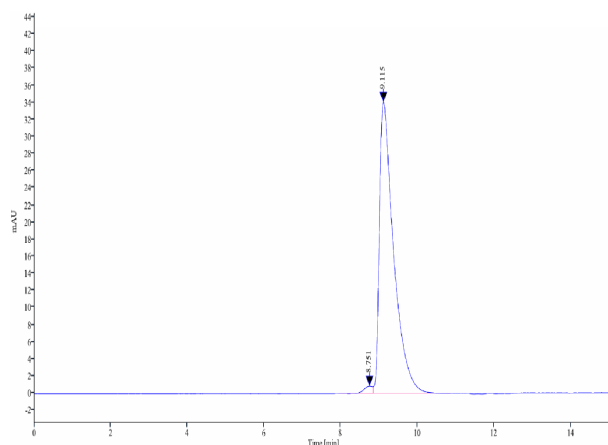
Assay Data

Bis-Tris PAGE



Human Semaphorin 4A on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human Semaphorin 4A is greater than 90% as determined by SEC-HPLC.