

# Mouse SEMA3A/Semaphorin-3A Protein

Cat. No. SEM-MM13A

## Description

<b>Source</b>	Recombinant Mouse SEMA3A/Semaphorin-3A Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Tyr21-Val772.
<b>Accession</b>	O08665
<b>Molecular Weight</b>	The protein has a predicted MW of 86.6 kDa. Due to furin cleavage site, the protein migrates to 65-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

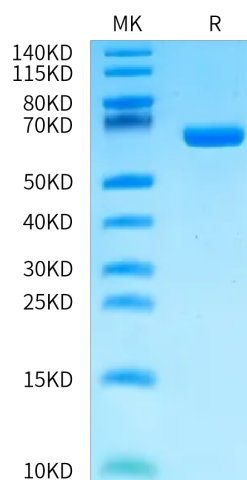
<b>Formulation</b>	Supplied as 0.22 µm filtered solution in PBS, 200 mM L-Argine (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The CRMP proteins were originally identified as mediators of Sema3A signaling and neuronal differentiation. Much has been learned about the mechanism by which CRMPs regulate cellular responses to Sema3A. The secreted protein Sema3A (collapsin-1) was the first identified vertebrate semaphorin. Sema3A acts primarily as a repulsive axon guidance cue, and can cause a dramatic collapse of the growth cone lamellipodium. Neuropilin-1 (NP1) and members of the class A plexins (PlexA) form a Sema3A receptor complex, with NP1 serving as a high-affinity ligand binding partner, and PlexA transducing the signal into the cell via its large intracellular domain.

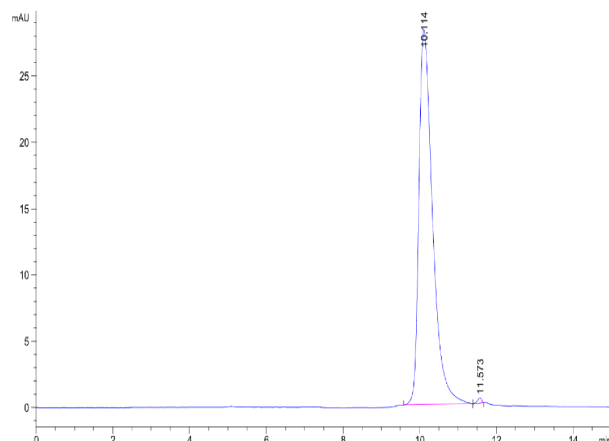
## Assay Data

### Bis-Tris PAGE



Mouse SEMA3A on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Mouse SEMA3A is greater than 95% as determined by SEC-HPLC.