

# Mouse SEMA4B Protein

Cat. No. SEM-MM14B

## Description

<b>Source</b>	Recombinant Mouse SEMA4B Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Leu31-Glu703.
<b>Accession</b>	Q62179
<b>Molecular Weight</b>	The protein has a predicted MW of 75.7 kDa. Due to glycosylation, the protein migrates to 78-83 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

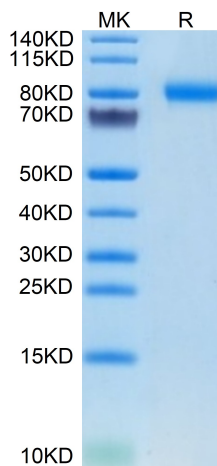
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Semaphorin 4B (SEMA4B) inhibits the invasion of non-small cell lung cancer (NSCLC) through PI3K-dependent suppression of MMP9 activation. SEMA4B may induce FoxO1 nuclear retention through suppressing PI3K/Akt signaling pathway, which subsequently inhibited cell growth through the direct nuclear target of FoxO1, p21. A role of SEMA4B in suppressing NSCLC growth, besides its role in inhibiting cell metastasis, and highlights SEMA4B as a promising therapeutic target for NSCLC.

## Assay Data

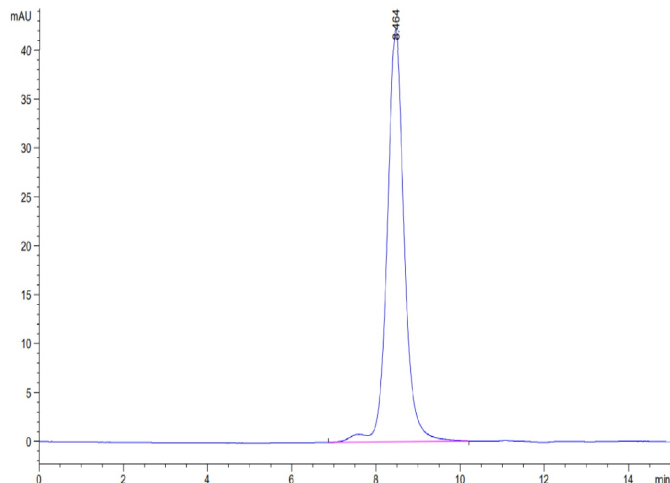
### Tris-Bis PAGE



Mouse SEMA4B on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Mouse SEMA4B is greater than 95% as determined by SEC-HPLC.