

# Human SEMA4B Protein

Cat. No. SEM-HM14B

## Description

<b>Source</b>	Recombinant Human SEMA4B Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Leu44-Glu717.
<b>Accession</b>	Q9NPR2
<b>Molecular Weight</b>	The protein has a predicted MW of 75.8 kDa. Due to glycosylation, the protein migrates to 80-110 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

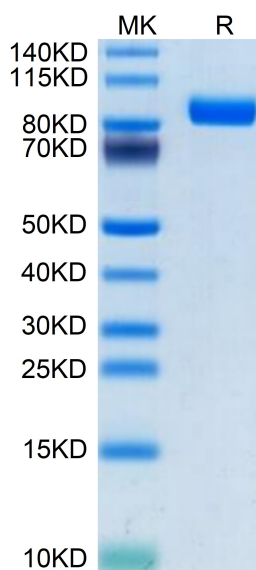
<b>Formulation</b>	Supplied as 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

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

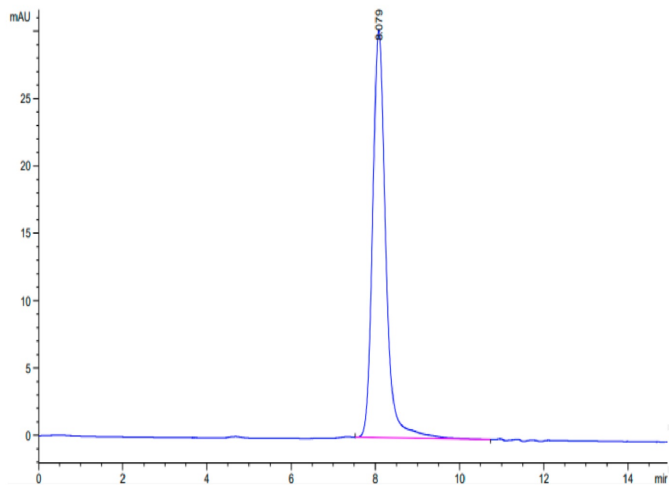
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data



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