

Human SEMA4B Protein

Cat. No. SEM-HM14B

Description

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

Formulation and Storage

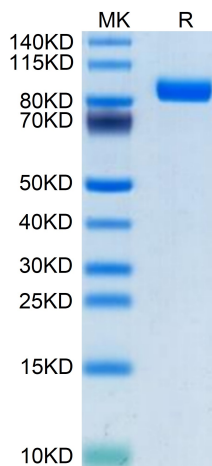
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -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

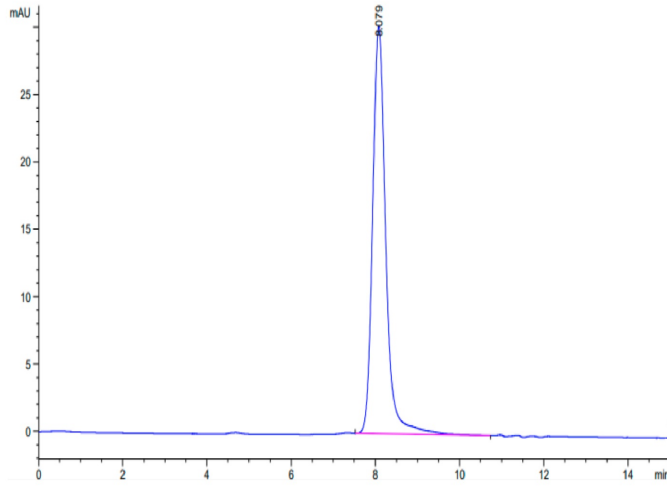
Tris-Bis PAGE



Human SEMA4B on Tris-Bis 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.