

**PRODUCT INFORMATION**

<b>Target</b>	SEMA4D
<b>Synonyms</b>	A8;BB18;GR3;CD100;C9orf164;CD100;SEMAJ
<b>Description</b>	Recombinant human SEMA4D protein with C-terminal 6×His tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	Q92854
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-6×His Tag
<b>Molecular Characterization</b>	SEMA4D(Met22-Arg734) 6×His tag
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 80 kDa after removal of the signal peptide. The apparent molecular mass of SEMA4D-His is approximately 95-130 kDa due to glycosylation.
<b>Purity</b>	The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
<b>Storage&amp;Shipping</b>	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
<b>Background</b>	Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell signaling (PubMed:20877282). Regulates GABAergic synapse development (By similarity). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner (By similarity). Modulates the complexity and arborization of developing neurites in hippocampal neurons by activating PLXNB1 and interaction with PLXNB1 mediates activation of RHOA (PubMed:19788569). Promotes the migration of cerebellar granule cells (PubMed:16055703). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (PubMed:8876214). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (PubMed:16055703).[UniProtKB/Swiss-Prot Function]
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated





Figure 1. Human SEMA4D Protein, His Tag on SDS-PAGE under reducing condition.

## Human SEMA4D, His Tagged protein ELISA

0.2  $\mu\text{g}$  of Human SEMA4D, His tagged protein per well

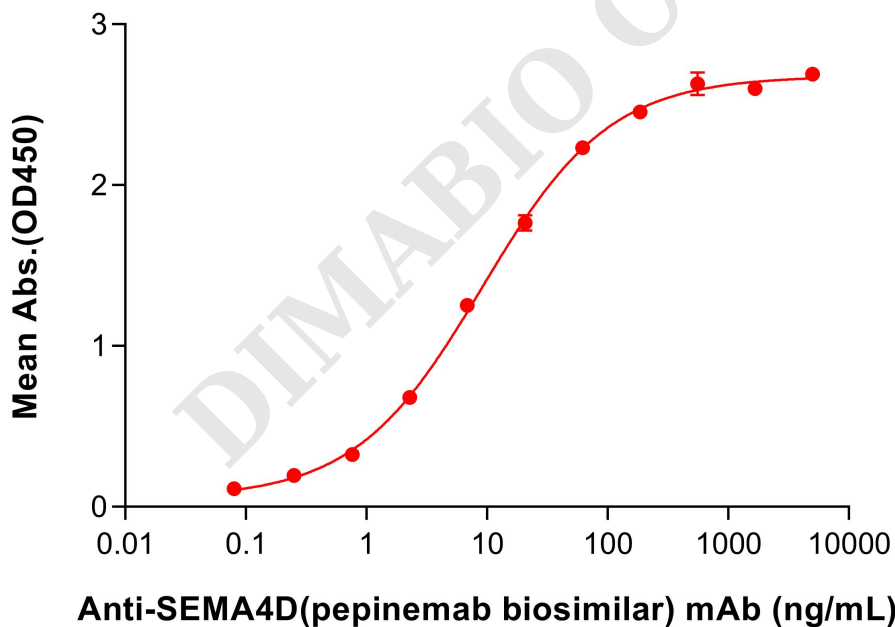


Figure 2. ELISA plate pre-coated by 2  $\mu\text{g}/\text{mL}$  (100  $\mu\text{L}/\text{well}$ ) Human SEMA4D Protein, His Tag (PME101131) can bind Anti-SEMA4D (pepinemab biosimilar) mAb (BME100614) in a linear range of 2.29–20.58 ng/mL.

