



# Recombinant Human Semaphorin-4D (SEMA4D), partial (Active)

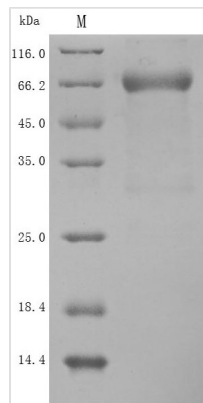
<b>Product Code</b>	CSB-MP835707HU
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q92854
<b>Form</b>	Lyophilized powder
<b>Storage Buffer</b>	Lyophilized from a 0.2 µm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Biological Activity</b>	Measured by its binding ability in a functional ELISA. Immobilized human SEMA4D at 2 µg/mL can bind Pepinemab, the EC <sub>50</sub> is 4.035-5.743 ng/mL.
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	MAFAPIPRITWEHREVHLVQFHEPDIYNYSALLLSEDKDTLYIGAREAVFAVNAL NISEKQHEVYWKVSEDKKAKCAEKGKSKQTECLNYIRVLQPLSATSLYVCGTN AFQPACDHLNLTFSKFLGKNEDGKGRCFPDPAHSYTSVMVDGELYSGTSYNF LGSEPIISRNSSHSPLRTEYAIPWLNESFVFADVIRKSPDSPDGEDDRVYFFFT EVSVEYEFVFRVLIPRIARVCKGDQGGRLTLQKKWTSFLKARLICSRPDSGLVF NVLRDVFLRSPGLKVPVFYALFTPQLNNVGLSAVCAYNLSTAEVFSHGKYM QSTTVEQSHTKWVRYNGPVPKPRPGACIDSEARAANYTSSLNLPDKTLQFVK DHPLMDDSVTPIDNRPRLIKDVNYTQIVVDRTQALDGTVDVMFVSTDRGAL HKAISLEHAVHIIETQLFQDFEPVQTLLLSSKKGNRFVYAGSNSGVVQAPLAF CGKHGTCEDCVLARDPYCAWSPPTATCVALHQTESPSRGLIQEMSGDASVCP DKSKGSYRQHFFKHGGTAELKCSQKSNLARVFWKFQNGVLKAESPKYGLMG RKNLLIFNLSEGD SGVYQCLSEERVKNKTVFQVVAKHVLEVKVVPKPVVAPTL SVVQTEGSRIATKVLVASTQGSSPPTPAVQATSSGAILPPKPAPTGTSCPEKI VINTVPQLHSEKTMYLKSSDNR
<b>Lead Time</b>	3-7 business days
<b>Research Area</b>	Immunology
<b>Source</b>	Mammalian cell
<b>Gene Names</b>	SEMA4D
<b>Expression Region</b>	22-734aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	C-terminal 10xHis-tagged



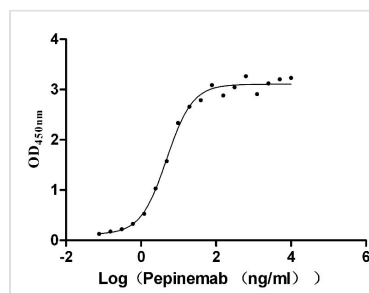
**Mol. Weight** 81.9 kDa

**Protein Description** Partial

**Image**



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



**Activity**  
Measured by its binding ability in a functional ELISA. Immobilized human SEMA4D at 2 µg/ml can bind Pepinemab, the EC<sub>50</sub> is 4.035-5.743 ng/mL.

## Description

The recombinant human semaphorin-4D (SEMA4D) is an active protein generated by the expression of the gene fragment encoding amino acids 22-734 of the human SEMA4D in mammalian cells. The 10xHis tag is fused to the C-terminal of this protein. Its purity is over 90% measured by SDS-PAGE. On the gel, this protein migrated to the molecular weight band of approximately 85 kDa. It contains less than 1.0 EU/ug endotoxin determined by the LAL method. In the functional ELISA, this recombinant SEMA4D protein can bind Pepinemab and the EC<sub>50</sub> is 4.035-5.743 ng/mL. SEMA4D, also known as CD100, has diverse effects on immunologic processes, including immune cell proliferation, differentiation, activation, and migration, through binding to its specific membrane receptors CD72, PLXNB1, and PLXNB2. It is also involved in the control of neurogenesis, angiogenesis, and tumor progression.

**Endotoxin** Less than 1.0 EU/ug as determined by LAL method.

**Reconstitution** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.