



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

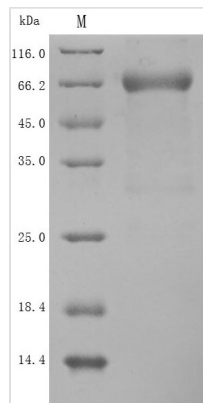
Product Code	CSB-MP835707HU
Abbreviation	Recombinant Human SEMA4D protein, partial (Active)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C.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



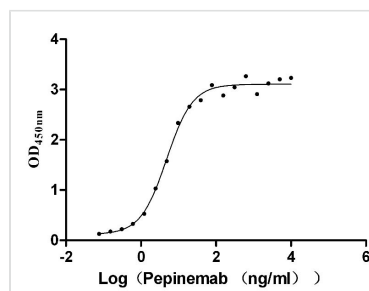
Mol. Weight 81.9 kDa

Protein Length 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 EC₅₀ 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 EC₅₀ 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.

Shelf Life 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.