



Recombinant Human SEM4D Fc-Fusion Protein

Cat No: Pr00185-10.9

Product Summary

Description: Recombinant human SEM4D Fc-Fusion Protein manufactured using [AbAb's Recombinant Platform](#)

Protein: Human SEM4D

Fc domain: Human IgG1

Structure / Form: Disulfide-linked homodimer

Species: Human

Construct Design Note(s): The extracellular domain of SEM4D has been fused to the Fc domain of human IgG1.

Host: HEK293

UniProt Accession Number: Q92854

Alternative Description: Semaphorin-4D, A8, BB18, GR3, CD100; SEM4D-Ig; SEM4D-Fc chimera; SEM4D (Fc tag)

Published Application(s):

Tested Applications(s):

Activity: Cell surface receptor for PLXN1B and PLXNB2 that plays an important role in cell-cell signaling. Promotes reorganization of the actin cytoskeleton and plays a role in axonal growth cone guidance in the developing central nervous system. Regulates dendrite and axon branching and morphogenesis. Promotes the migration of cerebellar granule cells and of endothelial cells. Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro). Promotes signaling via SRC and PTK2B/PYK2, which then mediates activation of phosphatidylinositol 3-kinase and of the AKT1 signaling cascade. Interaction with PLXNB1 mediates activation of RHOA [Uniprot].

Product Form

Purification: IMAC purified

Supplied in: 0.1 mg size: PBS with preservative (0.02% Proclin 300), 1 mg size: PBS only.

Endotoxin: <1.0 EU/mg

Shipping: The product is shipped on blue ice. Upon receipt, store it immediately at the temperature recommended.

Storage Recommendation: Store at 4°C for up to 1 month. For longer term storage aliquot in small volumes and store at -20°C. Avoid repeated freeze-thaw cycles.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals

SDS PAGE Purity: >95%, as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.

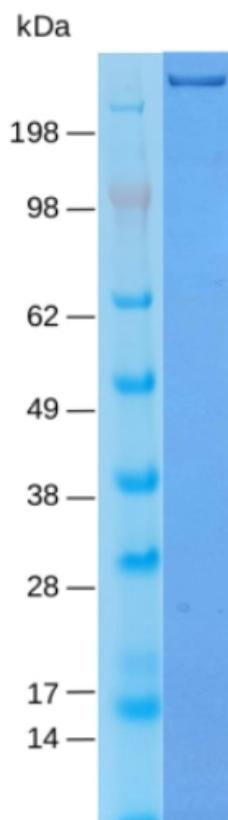
Fc-Fusion Sequence (monomer)

MAFAPIPRITWEHREVHLVQFHEPDIYNYSALLLSEDKDTLYIGAREAVFAVNALNISEKQHEVYWKVSEDKKAKCAEKG
KSKQTECLNYIRVLQPLSATSLYVCGTNAFQPACDHLNLTFSKFLGKNEDGKGRCPFDPAHSYTSVMVDGELYSGTSY
NFLGSEPIISRNSSHSPLRTEYAIPWLNESPFVADVIRKSPDSDGDDRIVYFFFTEVSVEYEFVFRVLIPRIARVCKGD
QGGLRTLQKKWTSFLKARLICSRPDGLVFNVLRDVFLRSPGLKVPVFYALFTPQLNNVGLSAVCAYNLSTAEVFSH
GKYMQSTTVEQSHTKWVRYNGPVPKPRPGACIDSEARAANYTSSLNLPDKTLQFVKDHPLMDDSVTPIDNRPRIKKD
VNYTQIVVDRTQALDGTVDVFMFVSTDRGALHKAISLEHAVHIIIEETQLFQDFEPVQTLSSKKGNRFVYAGSNSGVV
QAPLAFCGKHGTCEDCVLARDPYCAWSPPTATCVALHQTESPSRGLIQEMSGDASVCPDKSKGSYRQHFFKHGGTAE
LKCSQKSNLARVFWKFQNGVLKAESPKYGLMGRKNLLIFNLSEGDSGVYQCLSEERVKNKTVFQVVAKHVLEVKVVP
KPVVAPTLSVVQTEGSRIATKVLVASTQGSSPPTPAVQATSSGAILPFPKAPTGTSCPEKIVINTVPQLHSEKTMYLKSS
DNRGGGGSGGGGGSGGGGSEPKSQDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV
KFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTL
PPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVDFCSVM
HEALHNHYTQKSLSLSPGHHHHHH

Underlined amino acids sequence include a G4S linker and 6xHis epitope tag, respectively.

Calculated Molecular weight (dimer): 213803 Da

Extinction coefficient: 225920 (calculation performed as described by Pace *et al.* (1995), PMID: 8563639).



SEM4D (Pr00185-10.9) SDS-PAGE. Pr00185-10.9 under non-reducing conditions resolved by SDS-PAGE and stained using Coomassie-Blue.

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