

AR31164PU-N

Human CD100 / SEMA4D - Purified

Alternate names:

A8, BB18, GR3, SEMAJ, Semaphorin-4D

Quantity:

20 µg

Background:

The Semaphorins are a large family of phylogenetically conserved proteins that play a pivotal role in maintaining homeostasis in the immune system. Twenty members of this family have been identified and categorized into eight subclasses based on sequence similarity and distinctive structural features. CD100, also known as Sema4D, is a 150 kDa transmembrane class IV semaphorin. Studies have shown that CD100 can induce monocyte migration, T-cell activation, and B-cell survival, as well as T/B cell and T/DC "cooperation". The CD100 precursor contains 862 amino acids, including a 21 a.a. signal sequence, a 713 a.a. extracellular domain, a 21 a.a. transmembrane sequence, and a 107 a.a. cytoplasmic region. The extracellular sequence contains several structural features, including a 479 a.a. "sema" domain, a 79 a.a. Ig-like sequence, and a 52 a.a. "Plexin-type repeat".

Uniprot ID:

[Q92854](#)

NCBI:

[9606](#)

Species:

Human

Source:

CHO cells

Format:

State: Lyophilized purified protein

Purity: >97% by SDS-PAGE & HPLC analysis

Stabilizers: None

Endotoxin Level: < 0.1 ng per µg of sCD100

Reconstitution: Restore in water to a concentration of 0.1-1.0 mg/ml.

Description:

Recombinant soluble CD100 (sCD100) is a 78.9 kDa protein comprising the extracellular domain of CD100 (711 amino acids). SDS-PAGE analysis run under non-reducing conditions shows a mixture of disulfide linked dimer and monomer.

AA Sequence:

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FAPIPRITWE HREVHLVQFH EPDIYNYSAL LLSSEKDTLY IGAREAVFAV NALNISEKQH
EVYWKVSEDK KAKCAEKGKS KQTECLNYIR VLQPLSATSL YVCGTNAFQP ACDHLNLTSE
KFLGKNEDGK GRCPFDPAHS YTSVMVDGEL YSGTSYNFLG SEPIISRNSS HSPLRTEYAI
PWLNEPSFVF ADVIRKSPDS PDGEDDRVYF FFTEVSVEYE FVFRVLIPRI ARVCKGQDQG
LRTLQKKWTS FLKARLICS RDSGLVFNVL RDVFLVLRSPG LKVPVFYALF TPQLNNVGLS
AVCAYNLSTA EEVFSHGKYM QSTTVEQSHT KWVRYNGPVP KPRPGACIDS EARAANYTSS
LNLDPKTLQF VKDHPLMDDS VTPIDNRPR LKKDVNYTQI VVDRTQALDG TVYDVMFVST
DRGALHKAIS LEHAVHIEE TQLFQDFEPV QTLLLSKKKG NRFVYAGSNS GVVQAPLAF
GKHGTCEDCV LARDPYCAWS PPTATCVALH QTESPSRGLI QEMSGDASVC PDKSKGSYRQ
HFFKHGGTAE LKCSQKSNLA RVFWKFQNGV LKAESPKYGL MGRKNLLIFN LSEGDSGVYQ
CLSEERVKNK TVFQVVAHV LEVKVVPKPV VAPTLSVVQT EGSRIATKVL VASTQGSSPP
TPAVQATSSG AITLPPKPAP TGTSCPEKIV INTVPQLHSE KTMYLKSSDN R
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Biological Activity: Measured by its ability to inhibit chemokine (hMCP-3) induced human monocyte migration.

Molecular weight: 78.9 kDa

Add. Information:

Centrifuge vials before opening!

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.
After reconstitution store the antibody undiluted at 2-8°C for one month
or (in aliquots) at -20°C long term.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.