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## 32-20640: Recombinant Human sCD100(Discontinued)

Reactivity: Human

Alternative Name: soluble CD100, Semaphorin-4D, BB18, A8, GR3

## **Description**

### Source: CHO cells

The Semphorins 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 amino acids signal sequence, a 713 amino acids extracellular domain, a 21 amino acids transmembrane sequence, and a 107 amino acids cytoplasmic region. The extracellular sequence contains several structural features, including a 479 amino acids "sema" domain, a 79 amino acids Ig-like sequence, and a 52 amino acids "Plexin-type repeat". Recombinant Human soluble CD100 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.

#### **Product Info**

Amount:  $5 \mu g / 20 \mu g$ 

**Purification**: Purity:>= 97% by SDS-PAGE gel and HPLC analyses. **Content**: This recombinant protein is supplied in lyophilized form.

Amino Acid: FAPIPRITWE HREVHLVQFH EPDIYNYSAL LLSEDKDTLY IGAREAVFAV NALNISEKQH

EVYWKVSEDK KAKCAEKGKS KQTECLNYIR VLQPLSATSL YVCGTNAFQP ACDHLNLTSF KFLGKNEDGK GRCPFDPAHS YTSVMVDGEL YSGTSYNFLG SEPIISRNSS HSPLRTEYAI PWLNEPSFVF ADVIRKSPDS PDGEDDRVYF FFTEVSVEYE FVFRVLIPRI ARVCKGDQGG LRTLQKKWTS FLKARLICSR PDSGLVFNVL RDVFVLRSPG LKVPVFYALF TPQLNNVGLS AVCAYNLSTA EEVFSHGKYM QSTTVEQSHT KWVRYNGPVP KPRPGACIDS EARAANYTSS LNLPDKTLQF VKDHPLMDDS VTPIDNRPRL IKKDVNYTQI VVDRTQALDG TVYDVMFVST DRGALHKAIS LEHAVHIIEE TQLFQDFEPV QTLLLSSKKG NRFVYAGSNS GVVQAPLAFC GKHGTCEDCV LARDPYCAWS PPTATCVALH QTESPSRGLI QEMSGDASVC PDKSKGSYRQ HFFKHGGTAE LKCSQKSNLA RVFWKFQNGV LKAESPKYGL MGRKNLLIFN LSEGDSGVYQ CLSEERVKNK TVFQVVAKHV LEVKVVPKPV VAPTLSVVQT EGSRIATKVL VASTQGSSPP

TPAVQATSSG AITLPPKPAP TGTSCEPKIV INTVPQLHSE KTMYLKSSDN R

# **Application Note**

Measured by its ability to inhibit chemokine (hMCP-3) induced human monocyte migration.