

## Product datasheet for **AR31164PU-N**

### CD100 / SEMA4D Human Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	CD100 / SEMA4D human recombinant protein, 20 µg
<b>Species:</b>	Human
<b>Expression Host:</b>	CHO
<b>Expression cDNA Clone or AA Sequence:</b>	FAIPRITWE HREVHLVQFH EPDIYNYSAL LLEDKDTLY IGAREAVFAV NALNISEKQH EVYWKVSEDK KAKCAEKGKS KQTECLNYIR VLQPLSATSL YVCGTNAFQP ACDHLNLTSL FFLGKKNEDGK GRCFPDPAHS YTSVMVDGEL YSGTSYNFLG SEPIISRNS HSPLRTEYAI PWLNEPSFVF ADVIRKSPDS PDGEDDRVYF FFTEVSVEYE FVFRVLIPRI ARVCKGDQGG LRTLQKKWTS FLKARLICSR PDSGLVFNVL RDVFLRSPG LKVPVFYALF TPQLNNVGLS AVCAYNLSTA EEVFSHGKYM QSTTVEQSHT KWVRYNGPVP KPRPGACIDS EARAANYTSS LNLDPKTLQF VKDHPLMDDS VTPIDNRPRL IKKDVNYTQI VVDRQALDG TVYDVMFVST DRGALHKAIS LEHAVHIEE TQLFQDFEPV QTLSSSKKG NRFVYAGSNS GVVQAPLAF GKHGTCEDCV LARDPYCAWS PPTATCVLH QTESPSRGLI QEMSGDASVC PDKSKGSYRQ HFFKHGGTAE LKCSQKSNLA RVFWKFQNGV LKAESPKYGL MGRKNLLIFN LSEGDSGVYQ CLSEERVKNK TVFQVAKHV LEVKVWPKPV VAPTLSVVQT EGSRIATKVL VASTQGSSPP TPAVQATSSG AITLPPKPAP TGTSCEPKIV INTVQLHSE KTMYLKSSDN R
<b>Predicted MW:</b>	78.9 kDa
<b>Purity:</b>	>97% by SDS-PAGE & HPLC analysis
<b>Buffer:</b>	Presentation State: Purified State: Lyophilized purified protein Stabilizer: None
<b>Bioactivity:</b>	Biological: Measured by its ability to inhibit chemokine (hMCP-3) induced human monocyte migration.
<b>Endotoxin:</b>	< 0.1 ng per µg of sCD100
<b>Reconstitution Method:</b>	Restore in water to a concentration of 0.1-1.0 mg/ml.
<b>Preparation:</b>	Lyophilized purified protein
<b>Protein Description:</b>	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.



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<b>Note:</b>	Centrifuge vials before opening!
<b>Storage:</b>	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.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Locus ID:</b>	349236
<b>Cytogenetics:</b>	9q22.2
<b>Synonyms:</b>	FLJ39737
<b>Summary:</b>	<p>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”.</p>