Recombinant human semaphorin-4D protein

Catalog Number: ATGP4145

PRODUCT INFORMATION

Expression system
HEK293

Domain
22-734aa

UniProt No.
Q92854

NCBI Accession No.
NP_006369

Alternative Names
SEMA4D, SEMA-4D, semaphorin-4D isoform 1, semaphorin4D, C9orf164, CD100, coll-4, COLL4, M-sema-G, SEMAJ, previously Sem J, G or C-like 2, A8, BB18, GR3

PRODUCT SPECIFICATION

Molecular Weight
106.1kDa (952aa)

Concentration
1mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
hIgG-His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
Semaphorin4D, also known as CD100, is a member of the Class 4 family of transmembrane immune and nervous system semaphorins. It is an important mediator of the movement and differentiation of multiple cell types, including those of the immune, vascular, and nervous systems. It serves important roles in T cell priming,

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antibody production, and cell-to-cell adhesion. Sema4D, produced by T cells, activated B cells and dendritic cells acts through a low affinity receptor termed CD72 in the immune system. Unligated CD72 inhibits antigen presenting cells that express it, and this inhibition is relieved by Sema4D binding. It is reflected in its ability to inhibit ovarian carcinoma cell survival.Recombinant human semaphorin-4D, fused to hIgG-His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

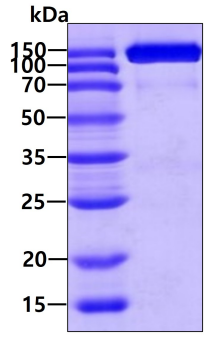
MAFAPIPRIT WEHREVHLVQ FHEPDIYNYS ALLLSEDKDT LYIGAREAVF AVNALNISEK QHEVYWKVSE DKKAKCAEKG KSKQTECLNY IRVLQPLSAT SLYVCGTNAF QPACDHLNLT SFKFLGKNED GKGRCPFDPA HSYTSVMVDG ELYSGTSYNF LGSEPIISRN SSHSPLRTEY AIPWLNEPSF VFADVIRKSP DSPDGEDDRV YFFFTEVSVE YEFVFRVLIP RIARVCKGDQ GGLRTLQKKW TSFLKARLIC SRPDSGLVFN VLRDVFVLRS PGLKVPVFYA LFTPQLNNVG LSAVCAYNLS TAEEVFSHGK YMQSTTVEQS HTKWVRYNGP VPKPRPGACI DSEARAANYT SSLNLPDKTL QFVKDHPLMD DSVTPIDNRP RLIKKDVNYT QIVVDRTQAL DGTVYDVMFV STDRGALHKA ISLEHAVHII EETQLFQDFE PVQTLLLSSK KGNRFVYAGS NSGVVQAPLA FCGKHGTCED CVLARDPYCA WSPPTATCVA LHQTESPSRG LIQEMSGDAS VCPDKSKGSY RQHFFKHGGT AELKCSQKSN LARVFWKFQN GVLKAESPKY GLMGRKNLLI FNLSEGDSGV YQCLSEERVK NKTVFQVVAK HVLEVKVVPK PVVAPTLSVV QTEGSRIATK VLVASTQGSS PPTPAVQATS SGAITLPPKP APTGTSCEPK IVINTVPQLH SEKTMYLKSS DNR<VEPKSCD KTHTCPPCPA PELLGGPSVF LFPPKPKDTL MISRTPEVTC VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC KVSNKALPAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLTCLVKG FYPSDIAVEW ESNGQPENNY KTTPPVLDSD GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL SLSPGKHHHH HH>

General References

Kumanogoh, A. and H. Kikutani (2004) Cell. Mol. Life Sci. 61:292-300.
Janssen, B.J.C. et al. (2010) Nature 467:1118-1122.
Kumanogoh, A. et al. (2005) Int. Immunol. 17:1277-1282.
Ishida, I. et al. (2003) Int. Immunol. 15:1027-1034.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain