Human Semaphorin 4D / SEMA4D / CD100 Protein (His Tag)

Catalog Number: **11825-H08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

C9orf164; CD100; coll-4; COLL4; M-sema-G; SEMAJ

Protein Construction:

A DNA sequence encoding the human SEMA4D (AAH54500.1) extracellular domain (Met 1-Arg 734) was expressed, with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to bind mouse CD45 hFc in functional ELISA.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Met 22

Molecular Mass:

The recombinant human SEMA4D consists of 725 amino acids and predictes a molecular mass of 80.7 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhSEMA4D is approximately 110 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

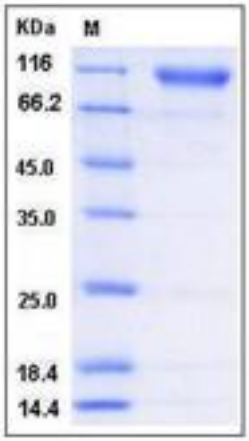
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Semaphorin 4D (SEMA4D or CD100) is a member of the semaphorin family of proteins and an important mediator of the movement and differentiation of multiple cell types, including those of the immune, vascular, and nervous systems. VEGF and SEMA4D had a positive correlation with the malignant degree of ovarian cancer, and SEMA4D can serve as an independent prognostic factor. SEMA4D was the first semaphorin described to have immune functions and serves important roles in T cell priming, antibody production, and cell-to-cell adhesion. Proteolytic cleavage of SEMA4D from the cell surface gives rise to a soluble fragment of SEMA4D (sSEMA4D). Similar to the transmembranal form, sSEMA4D is thought to have immunoregulatory properties.