

Rat Semaphorin 4D / SEMA4D / CD100 Protein (Fc Tag)

Catalog Number: 80320-R02H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

SEMA4D

Protein Construction:

A DNA sequence encoding the rat SEMA4D (NP_001164034.1)(Met1-Met712) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

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

Predicted N terminal: Phe 24

Molecular Mass:

The recombinant rat SEMA4D/Fc is a disulfide-linked homodimer. The reduced monomer comprises 930 amino acids and has a predicted molecular mass of 103.4 kDa. The apparent molecular mass of the protein is approximately 118 kDa in SDS-PAGE under reducing conditions.

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°C to -80°C.

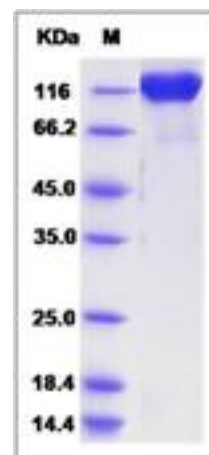
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Semaphorin 4D (SEMA4D or CD1) 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.