

For Research Use Only

# Recombinant Human Semaphorin 4D/CD100 protein (rFc Tag)(HPLC verified)

Catalog Number: Eg1999



## Basic Information

**Species:**  
Human

**Purity:**  
>90 %, SDS-PAGE<br>>90 %, SEC-HPLC

**Tag:**  
rFc Tag

## Technical Specifications

**Purity:**  
>90 %, SDS-PAGE<br>>90 %, SEC-HPLC

**Endotoxin Level:**  
<0.1 EU/  $\mu$ g protein, LAL method

**Source:**  
HEK293-derived Human Semaphorin 4D protein Met22-Arg734 (Accession# Q92854-1) with a rabbit IgG Fc tag at the C-terminus.

**GeneID:**  
10507

**Accession:**  
Q92854-1

**Predicted Molecular Mass:**  
105.4 kDa

**SDS-PAGE:**  
110-150 kDa, reducing (R) conditions

**Formulation:**  
Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Not tested

## Storage and Shipping

**Storage:**  
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

**Shipping:**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

CD100 (also known as SEMA4D), a 150 kDa homodimer, belongs to the family of immune semaphorins, and CD100 is abundantly expressed on resting T cells, NK cells, and antigen-presenting cells. As a transmembrane glycoprotein, it is digested to its soluble form, sCD100, by specific matrix metalloproteinases. CD100 has been reported that the expression levels of CD100, and one of its receptors, plexin-B1 (PLXNB1), are increased in head and neck, prostate, colon, breast, and lung cancers, and the interaction between them provides oncogenic signaling essential for tumor growth and metastasis.

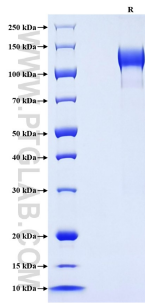
## References

1. Ewe Seng Ch'ng, et al. (2010) Mol Cancer. 9:251.
2. John R Basile, et al. (2007) J Biol Chem. 282(9):6899-905.
3. A Elhabazi, et al. (2001) J Immunol. 166(7):4341-7.
4. John R Basile, et al. (2007) J Biol Chem. 282(9):6899-905.
5. Jose Rafael Sierra, et al. (2008) J Exp Med. 205(7):1673-85.

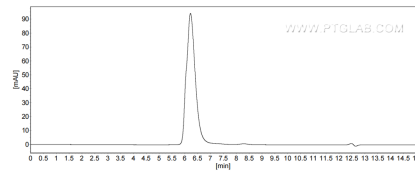
## Synonyms

CD100, SEMA4D, A8, CD 100, CD100 antigen

## Selected Validation Data



Purity of Recombinant Human Semaphorin 4D was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



The purity of Human Semaphorin 4D/CD100 was greater than 90% as determined by SEC-HPLC.

For technical support and original validation data for this product please contact

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