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Human CellExp SEMA4D /CD100, human recombinant protein

SEMA4D, C9orf164, CD100, FLJ33485, FLJ34282, FLJ39737, FLJ46484, M-sema-G, MGC169138, MGC169141, SEM

Catalog # PBV11060r

Specification

Human CellExp SEMA4D /CD100, human recombinant protein - Product info

Primary Accession	Q92854
Calculated MW	**This protein is fused with Fc fragment of human IgG1 at the C-terminus, has a calculated MW of 105.4 kDa expressed. The predicted N-terminus is Met 22. Protein migrates as 120-140 kDa in reduced SDS-PAGE due to glycosylation. KDa**

Human CellExp SEMA4D /CD100, human recombinant protein - Additional Info

Gene ID	**10507**
Gene Symbol	**SEMA4D**

Other Names
SEMA4D, C9orf164, CD100, FLJ33485, FLJ34282, FLJ39737, FLJ46484, M-sema-G, MGC169138, MGC169141, SEMAJ, coll-4, Semaphorin-4D

Gene Source	**Human**
Source	**HEK293 cells**
Assay&Purity	**SDS-PAGE; ≥95%**
Assay2&Purity2	**N/A;**
Recombinant	**Yes**
Results	**Measured by its ability to promote the survival and differentiation of human peripheral blood monocytes. The ED50 for this effect is typically 2.0-6.3 µg/ml.**

Target/Specificity
SEMA4D /CD100

Application Notes
Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format
Lyophilized

Storage
-20°C; Lyophilized from 0.22 µm filtered solution in 50 mM tris, 100 mM glycine, pH 7.0. Normally Mannitol or Trehalose is added as protectants before lyophilization.

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Human CellExp SEMA4D /CD100, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Human CellExp SEMA4D /CD100, human recombinant protein - Images

Human CellExp SEMA4D /CD100, human recombinant protein - Background

Cluster of Differentiation 100 (CD100), also known as Semaphorin-4D (SEMA4D), is a single-pass type I membrane protein which belongs to the semaphorin family, and is a human 150-kDa homodimer expressed at the surface of most hemopoietic cells. Semaphorin genes encode soluble and membrane-bound proteins, most of which have been shown to act as chemorepellents on growth cone guidance. CD100 is discrete, as it is a transmembrane leukocyte surface molecule that can also exist in a soluble form. Semaphorin 4D (Sema 4D) is an axon guidance molecule which is secreted by oligodendrocytes and induces growth cone collapse in the central nervous system. By binding plexin B1 receptor it functions as an R-Ras GTPase-activating protein (GAP) and repels axon growth cones in both the mature central nervous system. In the immune system, CD100 binds CD72 to activate B cells and dendritic cells, though much about this interaction is still under investigation. It is involved in oligodendrogenesis during development and during recovery from ischemic injury.

Human CellExp SEMA4D /CD100, human recombinant protein - References

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