

Rhesus DC-SIGN / CD209 Protein (Fc Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 90319-C01H

General Information

Gene Name Synonym:

CD209; DC-SIGN

Protein Construction:

A DNA sequence encoding the rhesus CD209 (AAK74185.1) (Lys62-Glu381) was expressed with the Fc region of human IgG1 at the N-terminus.

Source: Rhesus

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE.

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu

Molecular Mass:

The recombinant rhesus CD209 consists of 580 amino acids and predicts a molecular mass of 64.9 kDa.

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

Storage:

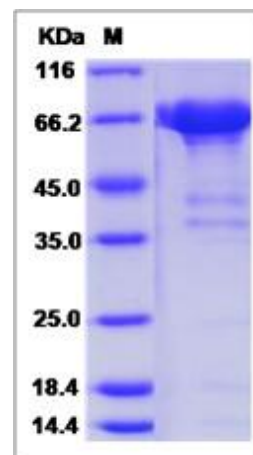
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Dendritic cell (DC)-specific intercellular adhesion molecule 3 (ICAM-3) grabbing nonintegrin (DC-SIGN), also known as CD209, is a type II transmembrane protein on DCs with a C-type lectin extracellular domain, is capable of binding ICAM-3 on resting T cells in the secondary lymphoid organs, providing the initial contact between these cells during the establishment of cell-mediated immunity. It is not only a pattern recognition receptor but implicated in immunoregulation of DCs. It has important role in mediating DC adhesion, migration, inflammation, activating primary T cell, triggering immune response and participating in immune escape of pathogens and tumors. DC-SIGN also mediates capture and internalization of viral, bacterial, and fungal pathogens by dendritic cells, such as HIV-1, Ebola virus, cytomegalovirus, Dengue virus, and hepatitis C virus. DC-SIGN is unique in that it regulates adhesion processes, such as DC trafficking and T-cell synapse formation, as well as antigen capture. Moreover, even though several C-type lectins have been shown to bind HIV-1, DC-SIGN does not only capture HIV-1 but also protects it in early endosomes allowing HIV-1 transport by DC to lymphoid tissues, where it enhances trans infection of T cells.

References

1. Geijtenbeek TB, *et al.* (2002) DC-SIGN, a C-type lectin on dendritic cells that unveils many aspects of dendritic cell biology. *J Leukoc Biol.* 71(6): 921-31.
2. Masso M. (2003) DC-SIGN points the way to a novel mechanism for HIV-1 transmission. *MedGenMed.* 5(2): 2.
3. Zhou T, *et al.* (2006) DC-SIGN and immunoregulation. *Cell Mol Immunol.* 3(4): 279-83.

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