

RP01489

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# Recombinant Human DC-SIGN/CD209 Protein

Catalog No.: RP01489

Recombinant

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	30835	Q9NNX6-1

### Tags

C-His

### Synonyms

CD209; CDSIGN; CLEC4L; DC-SIGN; DC-SIGN1; CLEC4L; DC-SIGN; DC-SIGN1

## Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

### Endotoxin

<0.1EU/μg

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Background

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 an 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 the 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.

## Basic Information

### Description

Recombinant Human DC-SIGN/CD209 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln59-Ala404) of human CD209/DC-SIGN (Accession #NP\_066978.1) fused with a 6×His tag at the C-terminus.

### Bio-Activity

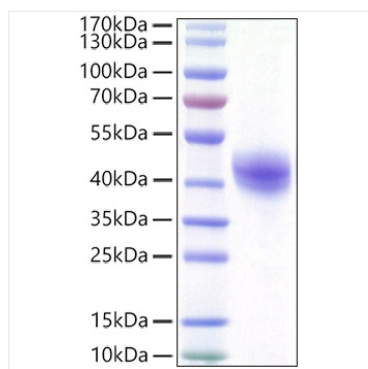
Measured by the ability of the immobilized protein to support the adhesion of ICAM-3 expressing CHO Chinese hamster ovary cells. When 5 x 10<sup>4</sup> cells/well are added to Recombinant Human DC<sub>x001e</sub>\_SIGN/CD209 Protein coated plates (5 μg/mL with 100 μL/well), approximately 10-20% of added cells will adhere after 1 hour at 37°C.

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

## Validation Data

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Recombinant Human DC-SIGN/CD209 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 40-50kDa.