



# Recombinant Protein Technical Manual

## Recombinant Human DC-SIGN/CD209 Protein (Fc Tag)

RPE5123

### Product Data:

**Product SKU:** RPE5123

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_066978.1

### Protein Information:

**Molecular Mass:** 65.8 kDa

**AP Molecular Mass:** 75 kDa

**Tag:** N-Fc

**Bio-activity:**

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** CD209;CDSIGN;CLEC4L;DC-SIGN;DC-SIGN1;MGC129965

## Immunogen Information:

**Sequence:** Lys 62-Ala 404

## 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 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, 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, DC-SIGN does not only capture HIV but also protects it in early endosomes allowing HIV transport by DC to lymphoid tissues, where it enhances trans infection of T cells.