Recombinant Human DC-SIGN/CD209 Protein

Catalog No.: RP01489

www.abclonal.com

Sequence Information

Species
Human

Gene ID
30835

Swiss Prot
Q9NNX6-1

Tags
C-His

Synonyms
CD209,CDSIGN,CLEC4L,DC-SIGN, DC-SIGN1, CLEC4L, DC-SIGN, DC-SIGN1

Product Information

Source
HEK293 cells

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
40.28 kDa

Observed MW
40-50 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

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.

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 104 cells/well are added to Recombinant Human DC_x001e_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℃.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

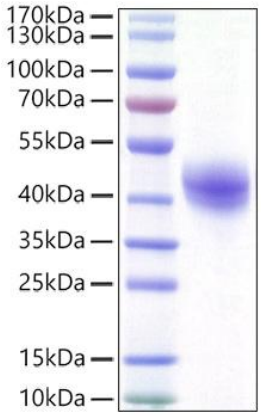
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



Recombinant Human DC-SIGN/CD209 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.