

# Human CD209/DC-SIGN Protein

Cat. No. SIG-HM101

## Description

|                         |  |
|-------------------------|--|
| <b>Source</b>           | Recombinant Human CD209/DC-SIGN Protein is expressed from HEK293 with His tag at the N-Terminus.<br>It contains Gln59-Ala404.      |
| <b>Accession</b>        | Q9NNX6-1   |
| <b>Molecular Weight</b> | The protein has a predicted MW of 40.5 kDa. Due to glycosylation, the protein migrates to 52-60 kDa based on Tris-Bis PAGE result. |
| <b>Endotoxin</b>        | Less than 1EU per µg by the LAL method.  |
| <b>Purity</b>           | > 95% as determined by Tris-Bis PAGE<br>> 95% as determined by HPLC  |

## Formulation and Storage

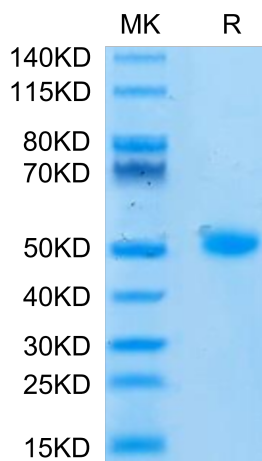
|                       |   |
|-----------------------|---|
| <b>Formulation</b>    | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.  |
| <b>Reconstitution</b> | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.  |
| <b>Storage</b>        | -20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

## Background

C-type lectin CD209/DC-SIGN and CD209L/L-SIGN proteins are distinct cell adhesion and pathogen recognition receptors that mediate cellular interactions and recognize a wide range of pathogens, including viruses such as SARS, SARS-CoV-2, bacteria, fungi and parasites. Pathogens exploit CD209 family proteins to promote infection and evade the immune recognition system.

## Assay Data

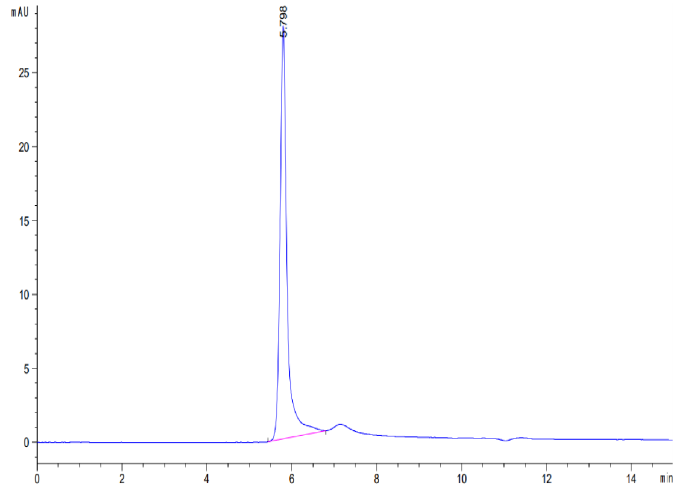
### Tris-Bis PAGE



Human CD209 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

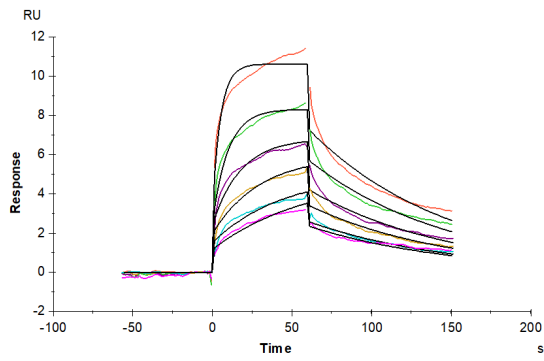
### SEC-HPLC

Assay Data



The purity of Human CD209 is greater than 95% as determined by SEC-HPLC.

SPR Data



Human BTN2A1, His Tag immobilized on CM5 Chip can bind Human CD209, His Tag with an affinity constant of 0.12  $\mu$ M as determined in SPR assay (Biacore T200).