Recombinant CD209 protein (His tag)

Catalog Number	543680
Synonyms	C-type lectin domain family 4 member L; Dendritic cell-specific ICAM-3-grabbing non-integrin 1; DC-SIGN; DC-SIGN1; CD antigen CD209
Species	Human
Expression System	E. coli
Accession	Q9NNX6
Molecular Weight	Predictes a molecular mass of 39.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	75-404
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 75-404 aa (Q9NNX6) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human CD209 (DC-SIGN) Fragment (aa 75-404) is a high-purity protein designed for studying the C-type lectin domain's role in pathogen recognition and immune response initiation. This 330-amino acid fragment encompasses the key functional domain, making it an ideal tool for investigating dendritic cell-mediated immunity and viral attachment mechanisms. CD209 (DC-SIGN) is a pathogen-recognition receptor expressed on immature dendritic cells that plays a critical role in initiating primary immune responses. This C-type lectin domain family member mediates endocytosis of pathogens for antigen presentation to T-cells via MHC class II proteins. It functions as a high-affinity receptor for ICAM2 and ICAM3, facilitating dendritic cell transendothelial migration and regulating T-cell proliferation. CD209 serves as an attachment receptor for multiple pathogens including HIV, Ebola virus, SARS-CoV, influenza virus, and Mycobacterium tuberculosis, recognizing high mannose N-linked oligosaccharides in a calcium-dependent manner. The full-length protein is primarily localized to the cell membrane as a single-pass type II membrane protein, though several secreted isoforms exist. This recombinant fragment specifically contains the functional C-type lectin domain (aa 263-378), enabling focused studies on its carbohydrate recognition and pathogen interaction capabilities.