

PRODUCT DATA SHEET

Bioworld Technology,Inc.

CD209 Recombinant Protein

Catalog: NCP0190 Host: E.coli Tag: His-tag

BackGround:

DC-SIGN (CD209, CLEC4L) is a C-type lectin receptor expressed by dendritic cells (DCs). The DC-SIGN transcript can undergo several splicing events to generate at least thirteen different transmembrane and soluble isoforms. DC-SIGN responds to a broad range of pathogens due to its ability to recognize both mannose and fructose carbohydrates, and is well studied for its role in HIV infection. Recognition of the HIV envelope glycoprotein gp120 by DC-SIGN leads to internalization of HIV by DCs and facilitates transmission of the virus to CD4+ T cells. DC-SIGN also mediates adhesion to T cells through interaction with ICAM-3, as well as transmigration across the endothelium by binding to ICAM-2. The DC-SIGN receptor can modulate TLR signaling by activating the kinase Raf-1. The closely related molecule DC-SIGNR (L-SIGN, CLEC4M) is 77% homologous to DC-SIGN and likely arose through a gene duplication event. Like DC-SIGN, DC-SIGNR binds mannose carbohydrates on the surface of pathogens. However, the expression patterns of the two receptors differ, as DC-SIGNR expression is restricted to endothelial cells of the liver, lymph node, and placenta. Murine cells contain a set of related molecules, SIGNR1-SIGNR8. Based on sequence analysis, there is no clear murine ortholog to human DC-SIGN, however SIGNR3 is the most functionally similar due to its ability to recognize both mannose and fructose structures.

Product:

PBS, 4M Urea, PH7.4

Molecular Weight:

~38kDa

Swiss-Prot:

Q9NNX6

Purification&Purity:

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

Restriction Sites:

NdeI-XhoI

Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at -20 C long term. Avoid freeze-thaw cycles.

Expression Vector:

pet-22b(+)

DATA:



Note:

For research use only, not for use in diagnostic procedure.

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