Recombinant human DC-SIGN/CD209 protein

Catalog Number: ATGP4010

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
60-404aa

UniProt No.
Q9NNX6

NCBI Accession No.
NP_066978

Alternative Names
CDSIGN, CLEC4L, CD209 antigen isoform 1, CD209 antigen, C-type lectin domain family 4 member L, Dendritic cell-specific ICAM-3-grabbing non-integrin 1, DC-SIGN, DC-SIGN1, CD_antigen, CD209

PRODUCT SPECIFICATION

Molecular Weight
66.5kDa (587aa)

Concentration
0.25mg/ml (determined by Absorbance at 280nm)

Formulation
Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 90% by SDS - PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
hIgG-His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
DC-SIGN/CD209, also known as Dendritic Cell-specific ICAM-3 Grabbing Non-integrin, is a member of the C-type lectin family. It is Pathogen-recognition receptor expressed on the surface of immature dendritic cells (DCs) and involved in initiation of primary immune response. DC-SIGN on macrophages recognises and binds with high

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affinity to high-mannose type N-glycans, a class of pathogen associated molecular patterns PAMPs commonly found on viruses, bacteria and fungi. This binding interaction activates phagocytosis. It has a high affinity for the ICAM3 molecule and binds various microorganisms by recognizing high-mannose-containing glycoproteins on their envelopes and especially functions as receptor for several viruses such as HIV and Hepatitis C. Besides functioning as an adhesion molecule, recent study has also shown that DC-SIGN can initiate innate immunity by modulating toll-like receptors, though the detailed mechanism is not yet known. It together with other C-type lectins is involved in recognition of tumors by dendritic cells. It is also a potential engineering target for dendritic cell based cancer vaccine. Recombinant human DC-SIGN/CD209, fused to hIgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

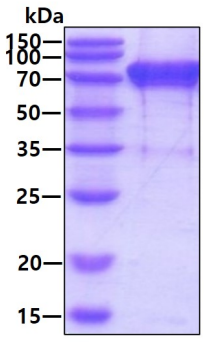
<ADP>VSKVPSS ISQEQSRQDA IYQNLTQLKA AVGELSEKSK LQEIYQELTQ LKAAVGELPE KSKLQEIYQE LTRLKAAVGE LPEKSKLQEI YQELTWLKAA VGELPEKSKM QEIYQELTRL KAAVGELPEK SKQQEIYQEL TRLKAAVGEL PEKSKQQEIY QELTRLKAAV GELPEKSKQQ EIYQELTQLK AAVERLCHPC PWEWTFFQGN CYFMSNSQRN WHDSITACKE VGAQLVVIKS AEEQNFLQLQ SSRSNRFTWM GLSDLNQEGT WQWVDGSPLL PSFKQYWNRG EPNNVGEEDC AEFSGNGWND DKCNLAKFWI CKKSAASCSR DEEQFLSPAP ATPNPPPA<VE PKSCDKTHTC PPCPAPELLG GPSVFLFPPK PKDTLMISRT PEVTCVVVDV SHEDPEVKFN WYVDGVEVHN AKTKPREEQY NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI SKAKGQPREP QVYTLPPSRD ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTTPP VLDSDGSFFL YSKLTVDKSR WQQGNVFSCS VMHEALHNHY TQKSLSLSPG KHHHHHH>

General References

Liu, W. et al, (2004) J. Biol. Chem. 279:18748.
Anthony, R.M. et al, (2008) Proc. Natl. Acad. Sci. USA 105:19571.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain