Anti-DC-SIGN Antibody [JE31-24]

HA721382

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 46 kDa
Clone number:	JE31-24

Description: DC-SIGN (Dendritic Cell-Specific Intercellular adhesion molecule-3-Grabbing Non-integrin) also known as CD209 (Cluster of Differentiation 209) is a protein which in humans is encoded by the CD209 gene. DC-SIGN is a C-type lectin receptor present on the surface of both macrophages and dendritic cells. DC-SIGN on macrophages recognises and binds with high affinity to high-mannose type N-glycans, a class of PAMPs (pathogen associated molecular patterns) commonly found on viruses, bacteria and fungi. This binding interaction activates phagocytosis. On myeloid and pre-plasmacytoid dendritic cells DC-SIGN mediates dendritic cell rolling interactions with blood endothelium and activation of CD4+ T cells, as well as recognition of pathogen haptens. DC-SIGN is a C-type lectin and has a high affinity for the ICAM3 molecule. It binds various microorganisms by recognizing high-mannose-containing glycoproteins on their surface, and can function as a co-receptor for several viruses such as HIV and Hepatitis C. Binding to DC-SIGN can promote HIV and Hepatitis C virus to infect target cells (T-cells and hepatocytes, respectively). Besides functioning as an adhesion molecule, recent studies have also shown that DC-SIGN can initiate innate immunity by modulating toll-like receptors, though the detailed mechanism is not yet known. DC-SIGN together with other C-type lectins is involved in recognition of tumors by dendritic cells. DC-SIGN is also a potential engineering target for dendritic cell based cancer vaccine.

Immunogen:	Recombinant protein within Human DC-SIGN aa 1-100 / 404.
Positive control:	A549 cell lysate, human skin tissue lysate, human placenta tissue lysate.
Subcellular location:	Cell membrane; Secreted.
Database links:	SwissProt: Q9NNX6 Human
Recommended Dilutions:	
WB	1:1,000
Storage Buffer:	1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.
Purity:	Protein A affinity purified.

Images

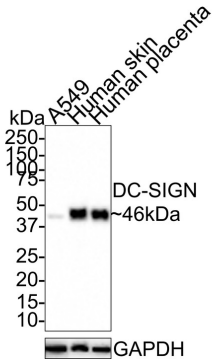

Fig1: Western blot analysis of DC-SIGN on different lysates with Rabbit anti-DC-SIGN antibody (HA721382) at 1/1,000 dilution.

Lane 1: A549 cell lysate (15 µg/Lane)
Lane 2: Human skin tissue lysate (30 µg/Lane)
Lane 3: Human placenta tissue lysate (30 µg/Lane)

Predicted band size: 46 kDa
Observed band size: 46 kDa

Exposure time: 3 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721382) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

Background References

1. Sales Pereira LH et al. Soluble DC-SIGN isoforms: Ligands with unknown functions - A mini-review. Microb Pathog. 2021 Jan
2. Xiaocui L et al. CSF-1-induced DC-SIGN+ macrophages are present in the ovarian endometriosis. Reprod Biol Endocrinol. 2022 Mar