

DC-SIGN (DCN47.5): sc-52660

BACKGROUND

Dendritic cells (DCs) are antigen-presenting immune system cells that are present on peripheral mucosal tissues and migrate to lymphoid tissues. DC-SIGN (DC-specific ICAM-3 grabbing nonintegrin) is a type II membrane protein that is exclusively expressed by DCs. DC-SIGN, also designated CD209, binds to ICAM-3 to mediate the initial interaction between DCs and resting T cells through the immunological synapse. The DCs that are present in the initial sites of HIV-1 infection capture HIV-1 through DC-SIGN, which then facilitates the migration of DCs to areas of T cell-rich secondary lymphoid organs, where it promotes efficient trans HIV-1 infection of those T cells. DC-SIGN functions to transport HIV-1 from exposed mucosal surfaces to a lymphoid compartment.

REFERENCES

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2. Steinman, R.M. 2000. DC-SIGN: A guide to some mysteries of dendritic cells. *Cell* 100: 491-494.
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7. Whelan, K.T., Lin, C.L., Cella, M., McMichael, A.J., Austyn, J.M. and Rowland-Jones, S.L. 2003. The HIV protease inhibitor indinavir reduces immature dendritic cell transendothelial migration. *Eur. J. Immunol.* 33: 2520-2525.

CHROMOSOMAL LOCATION

Genetic locus: CD209 (human) mapping to 19p13.2.

SOURCE

DC-SIGN (DCN47.5) is a mouse monoclonal antibody raised against DC-SIGN of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DC-SIGN (DCN47.5) is recommended for detection of DC-SIGN of human origin by flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for DC-SIGN siRNA (h): sc-43719, DC-SIGN shRNA Plasmid (h): sc-43719-SH and DC-SIGN shRNA (h) Lentiviral Particles: sc-43719-V.

Molecular Weight of DC-SIGN: 44 kDa.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.