

DC-SIGN Antibody

DC-SIGN (ED): Dendritic cell-specific ICAM-3-grabbing nonintegrin 1

CATALOG NO.: 2349

DC-SIGN Antibody (CT), Catalog No. **2347**.

BACKGROUND:

Dendritic cells (DCs) that control immune responses were recently found to capture and transport HIV from the mucosal area to remote lymph nodes (1), where DCs hand over HIV to CD4⁺ T lymphocytes. DCs also amplify the amount of virus and extend the duration of viral infectivity. Multiple strains of HIV-1, HIV-2 and SIV bind to DCs via DC-SIGN (2). ICAM-3 is the natural ligand for DC-SIGN (3). A DC-SIGN homologue (termed DC-SIGNR, L-SIGN, and DC-SIGN2) was identified recently (4-8). DC-SIGN forms a novel gene family with DC-SIGNR and many alternatively spliced isoforms of DC-SIGN and DC-SIGNR (8). The expression of DC-SIGN was found in mucosal tissues including placenta, small intestine, and rectum.

SOURCE:

Rabbit polyclonal DC-SIGN antibody was raised against a synthetic peptide corresponding to amino acids near the center of human DC-SIGN (1). (GenBank Accession No. Q9NNX6).

APPLICATION:

DC-SIGN antibody can be used for detection of DC-SIGN by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Human placenta lysate can be used as a positive control. A band at approximately 44 kDa can be detected. **For research use only.**

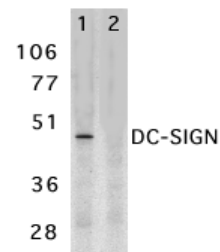
STORAGE:

DC-SIGN antibody is supplied as immunoaffinity purified IgG, in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

RELATED PRODUCTS:

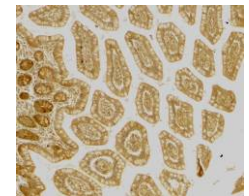
Blocking peptide, Catalog No. **2349P**.

Human Placenta Lysate, Catalog No. **1309**.



Western blot analysis of DC-SIGN expression in human placenta tissue lysate in the absence (lane 1) and presence (lane 2) of blocking peptide with DC-SIGN antibody at 2 µg/ml.

Immunohistochemistry of DC-SIGN in human small intestine tissue with DC-SIGN antibody at 10 µg/ml.



REFERENCES:

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7. Mitchell DA, Fadden AJ, Drickamer K. A novel mechanism of carbohydrate recognition by the C-type lectins DC-SIGN and DC-SIGNR: Subunit organisation and binding to multivalent ligands. *J. Biol. Chem.* 2001;
8. Mummidi S, Catano G, Lam L, et al. Extensive repertoire of membrane-bound and soluble DC-SIGN1 and DC-SIGN2 isoforms: Inter-individual variation in expression of DC-SIGN transcripts. *J. Biol. Chem.* 2001;

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