



CD209b (A-16): sc-25222

BACKGROUND

Antigen-presenting cells are localized in essentially every tissue, where they operate at the interface of innate and acquired immunity by capturing pathogens and presenting pathogen-derived peptides to T cells. Dendritic cells capture Ags or viruses in peripheral tissue to transport them to lymphoid organs to induce cellular T cell responses. DC-specific ICAM-grabbing non-integrin (DC-SIGN), functions as a cell adhesion receptor mediating both DC migration and T cell activation. DC-SIGN also functions as an HIV-1R that captures HIVgp120 and facilitates DC-induced HIV transmission of T cells through high-affinity binding to viral envelope glycoproteins. Internalization motifs in the cytoplasmic tail of DC-SIGN indicate a function of DC-SIGN as an endocytic receptor.

REFERENCES

1. Engering, A., Geijtenbeek, T.B., van Vliet, S.J., Wijers, M., van Liempt, E., Demareux, N., Lanzavecchia, A., Fransen, J., Figdor, C.G., Piguat, V., et al. 2002. The dendritic cell-specific adhesion receptor DC-SIGN internalizes antigen for presentation to T cells. *J. Immunol.* 168: 2118-2126.
2. Geijtenbeek, T.B., Groot, P.C., Nolte, M.A., van Vliet, S.J., Gangaram-Panday, S.T., van Duijnhoven, G.C., Kraal, G., et al. 2002. Marginal zone macrophages express a murine homologue of DC-SIGN that captures blood-borne antigens *in vivo*. *Blood* 100: 2908-2916.
3. Moris, A., Nobile, C., Buseyne, F., Porrot, F., Abastado, J.P., Schwartz, O. 2004. DC-SIGN promotes exogenous MHC-I-restricted HIV-1 antigen presentation. *Blood* 103: 2648-2654.

CHROMOSOMAL LOCATION

Genetic locus: Cd209b (mouse) mapping to 8 A1.1.

SOURCE

CD209b (A-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CD209b of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-25222 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 or our catalog for detailed protocols and support products.

APPLICATIONS

CD209b (A-16) is recommended for detection of CD209b of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.