

CD209g (V-14): sc-241347

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 antigens or viruses in peripheral tissue and transport them to lymphoid organs, an event that induces cellular T cell responses. The mouse CD209 family of cell adhesion receptors consists of CD209a (also known as DC-SIGN), CD209b, CD209c, CD209d, CD209e, CD209f and CD209g, all of which function to mediate the endocytosis and subsequent degradation of pathogens within lysosomal compartments. There are two human CD209 proteins, designated DC-SIGN and DC-SIGNR, which function in a similar manner to the mouse proteins.

REFERENCES

- Engering, A., et al. 2002. The dendritic cell-specific adhesion receptor DC-SIGN internalizes antigen for presentation to T cells. *J. Immunol.* 168: 2118-2126.
- Geijtenbeek, T.B., et al. 2002. Marginal zone macrophages express a murine homologue of DC-SIGN that captures blood-borne antigens *in vivo*. *Blood* 100: 2908-2916.
- Moris, A., et al. 2004. DC-SIGN promotes exogenous MHC-I-restricted HIV-1 antigen presentation. *Blood* 103: 2648-2654.
- Cormier, E.G., et al. 2004. L-SIGN (CD209L) and DC-SIGN (CD209) mediate transinfection of liver cells by hepatitis C virus. *Proc. Natl. Acad. Sci. USA* 101: 14067-14072.
- Weber, K.S., et al. 2004. Sialylation of ICAM-2 on platelets impairs adhesion of leukocytes via LFA-1 and DC-SIGN. *Inflammation* 28: 177-188.
- Sakuntabhai, A., et al. 2005. A variant in the CD209 promoter is associated with severity of dengue disease. *Nat. Genet.* 37: 507-513.
- de la Rosa, G., et al. 2005. Regulated recruitment of DC-SIGN to cell-cell contact regions during zymosan-induced human dendritic cell aggregation. *J. Leukoc. Biol.* 77: 699-709.
- Groot, F., et al. 2005. Lactoferrin prevents dendritic cell-mediated human immunodeficiency virus type 1 transmission by blocking the DC-SIGN-gp120 interaction. *J. Virol.* 79: 3009-3015.
- Davis, C.W., et al. 2006. The location of asparagine-linked glycans on West Nile virions controls their interactions with CD209 (dendritic cell-specific ICAM-3 grabbing nonintegrin). *J. Biol. Chem.* 281: 37183-37194.

CHROMOSOMAL LOCATION

Genetic locus: Cd209g (mouse) mapping to 8 A1.1.

SOURCE

CD209g (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CD209g of mouse origin.

RESEARCH USE

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

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-241347 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD209g (V-14) is recommended for detection of CD209g of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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); non cross-reactive with other CD209 family members.

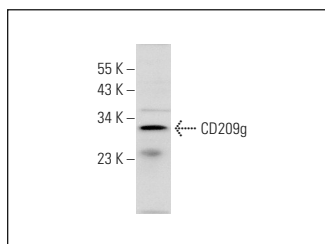
Suitable for use as control antibody for CD209g siRNA (m): sc-142189, CD209g shRNA Plasmid (m): sc-142189-SH and CD209g shRNA (m) Lentiviral Particles: sc-142189-V.

Positive Controls: mouse heart extract: sc-2254.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CD209g (V-14): sc-241347. Western blot analysis of CD209g expression in mouse heart tissue extract.

STORAGE

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

PROTOCOLS

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