## **Technical Data Sheet**

# PE Mouse Anti-Human CD209

#### **Product Information**

**Material Number:** 561765 Alternate Name: DC-SIGN 25 tests Size Vol. per Test: 20 ul DCN46 Clone:

Immunogen: Human Monocyte Derived DC Cells

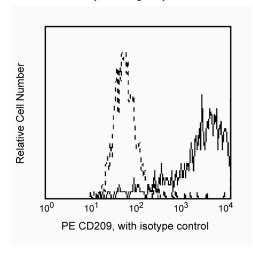
Isotype: Mouse IgG2b, κ Reactivity: QC Testing: Human

Storage Buffer: Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09%

sodium azide.

#### Description

The DCN46 antibody reacts with dendritic cell-specific ICAM-3 grabbing nonintegrin (DC-SIGN or CD209), a type-II membrane protein of approximately 44 kDa with a mannose-binding C-type lectin domain. It is highly expressed on dendritic cells in mucosal tissues. Its sequence is identical to the HIV-1 envelope gp120-binding C-type lectin, and reports suggest that DC-SIGN binds to HIV-1 gp120 and effectively transmits infectious HIV-1 to resting T lymphocytes expressing CD4 and chemokine receptors. The C-type lectin domain of DC-SIGN is also capable of binding other pathogenic viruses, bacteria, and parasites. Reports also suggest that DC-SIGN enables the highly efficient migration of dendritic cells from blood into the tissues. It can interact with ICAM-2, which has a similar sequence as ICAM-3, and is abundantly expressed on vascular and lymphoid endothelium. Thus, DC-SIGN mediates dendritic cells rolling and transendothelial migration, and its interaction with ICAM-2 is essential to specific migratory functions of dendritic cells.



Profile of cultured dendritic cells, derived from PBMC monocytes, analyzed by flow cytometry

#### **Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

#### **Application Notes**

#### Application

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Flow cytometry	Routinely Tested	

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
555743	PE Mouse IgG2b κ Isotype Control	100 tests	27-35
554656	Stain Buffer (FBS)	500 ml	(none)

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### **Product Notices**

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10<sup>6</sup> cells in a 100-μl experimental sample (a test).
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 6. An isotype control should be used at the same concentration as the antibody of interest.

#### References

Geijtenbeek TBH, Kwon DS, Torensma R, et al. DC-SIGN, a dendritic cell-specific HIV-1 -binding protein that enhances trans-infection of T cells. Cell. 2000; 100(5):587-597. (Biology)

Geijtenbeek TBH, Torensma R, van Vliet SJ, et al. Identification of DC-SIGN, a novel dendritic cell-specific ICAM-3 receptor that supports primary immune responses. Cell. 2000; 100(5):575-585. (Biology)

Sallusto F, Cella M, Danieli C, Lanzavecchia A. Dendritic cells use macropinocytosis and the mannose receptor to concentrate macromolecules in the major histocompatibility complex class II compartment: downregulation by cytokines and bacterial products. *J Exp Med.* 1995; 182(2):389-400. (Immunogen) Steinman RM. DC-SIGN: a guide to some mysteries to dendritic cells. *Cell.* 2000; 100(5):491-494. (Biology)

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