

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived cynomolgus monkey DC-SIGN/CD209 protein	
	Hemagglutinin Tag (YPYDVPDYA)	Cynomolgus Monkey DC-SIGN/CD209 (Lys62-Glu406) Accession # XP_015296329.1
	N-terminus	C-terminus

N-terminal Sequence Analysis Tyr of HA tag

Predicted Molecular Mass 40 kDa

SPECIFICATIONS

SDS-PAGE 44-54 kDa, under reducing conditions

Activity Measured by the ability of the immobilized protein to support the adhesion of ICAM-3 expressing CHO Chinese hamster ovary cells. The ED₅₀ for this effect is 1.25-8 µg/mL.

Endotoxin Level <0.10 EU per 1 µg of the protein by the LAL method.

Purity >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

Formulation Supplied as a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

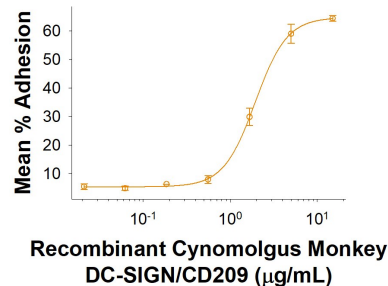
Shipping The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 6 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after opening.
- 3 months, -20 to -70 °C under sterile conditions after opening.

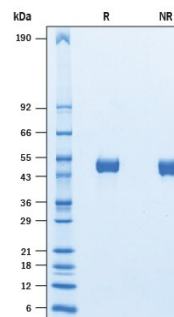
DATA

Bioactivity



Recombinant Cynomolgus Monkey DC-SIGN/CD209 HA-tag (Catalog # 10504-DC) supports the adhesion of ICAM-3 expressing CHO Chinese hamster ovary cells. The ED₅₀ for this effect is 1.25-8 µg/mL.

SDS-PAGE



2 µg/lane of Recombinant Cynomolgus Monkey DC-SIGN/CD209 HA-tag (Catalog # 10504-DC) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 44-54 kDa.

BACKGROUND

Dendritic Cell-specific ICAM-3 Grabbing Non-integrin (DC-SIGN)/CD209 is a member of the C-type lectin family (1). The canonical DC-SIGN/CD209 isoform is a 40 kDa, 344 amino acid (aa) type II transmembrane protein, with the extracellular domain (ECD) containing a Ca²⁺-dependent carbohydrate-binding lectin domain (2). Within the ECD, cynomolgus DC-SIGN/CD209 shares 85% sequence identity with human DC-SIGN/CD209. The DC-SIGN/CD209 lectin domain binds mannose oligosaccharides on pathogens including HIV as well as self-glycoproteins including ICAMs (2, 3). DC-SIGN/CD209 binds to butyrophilin 2A1 and this interaction can be blocked by HIV gp120. DC-SIGN/CD209 is expressed on dendritic cells (DC) and inflammatory macrophages and contributes to antigen presentation (4,5).

References:

1. Liu, W. *et al.* (2004) *J. Biol. Chem.* **279**:18748.
2. Curtis, B.M. *et al.* (1992) *Proc. Natl. Acad. Sci. USA* **89**:8356.
3. Anthony, R.M. *et al.* (2008) *Proc. Natl. Acad. Sci. USA* **105**:19571.
4. Geijtenbeek, T.B. *et al.* (2000) *Cell* **100**:575.
5. Garcia-Vallejo, J.J. and Y. van Kooyk (2013) *Trends Immunol.* **34**:482.