

## Recombinant Mouse DC-SIGN/CD209

Catalog Number: 8345-DC

Source	Mouse myeloma cell line, NS0-derived
000100	Val73-Lys238, with an N-terminal HA tag
	Accession # Q91ZX1
N-terminal Sequence Analysis	***
Predicted Molecular Mass	20 kDa
SPECIFICATIONS	
SDS-PAGE	21-26 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA.  When Recombinant Mouse DC-SIGN is coated at 1 μg/mL (100 μL/well), the concentration of Recombinant Mouse ICAM-5 Fc Chimera (Catalog # 1173-M5) that produces 50% optimal binding response is 0.8-4 μg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE with silver staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE	
Reconstitution	Reconstitute at 100 μg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  12 months from date of receipt, -20 to -70 °C as supplied.  1 month, 2 to 8 °C under sterile conditions after reconstitution.  3 months, -20 to -70 °C under sterile conditions after reconstitution.

## **BACKGROUND**

Mouse Dendritic Cell-specific ICAM-3 Grabbing Non-integrin (DC-SIGN)/CD209, also known as CD209 Antigen-like Protein A, is a member of the C-type lectin family (1). Mouse DC-SIGN/CD209 is a 33 kDa, 238 amino acid (aa) type II transmembrane protein (2). The extracellular region contains a Ca<sup>2+</sup>-dependent carbohydrate-binding lectin domain (2). In addition to the full-length mouse DC-SIGN/CD209, a second, truncated splice variant has been reported. DC-SIGN/CD209 is not well conserved between mouse and human with the extracellular domain sharing only 63% aa identity. The DC-SIGN/CD209 lectin domain binds mannose oligosaccharides on pathogens including HIV as well as self glycoproteins including ICAMs (2-4). DC-SIGN/CD209 is expressed on dendritic cells (DC) and inflammatory macrophages and contributes to antigen presentation (2, 5, 6).

## References:

- 1. Liu, W. et al. (2004) J. Biol. Chem. 279:18748.
- 2. Caminschi, I. et al. (2001) Mol. Immunol. 38:365.
- 3. Curtis, B.M. et al. (1992) Proc. Natl. Acad. Sci. USA 89:8356.
- 4. Anthony, R.M. et al. (2008) Proc. Natl. Acad. Sci. USA 105:19571.
- 5. Geijtenbeek, T.B. et al. (2000) Cell 100:575.
- 6. Garcia-Vallejo, J.J. and Y. van Kooyk (2013) Trends Immunol. 34:482.



