DENDRITICS

Monoclonal Anti-human DC-SIGN/CD209

Product reference: DDX0208

Description

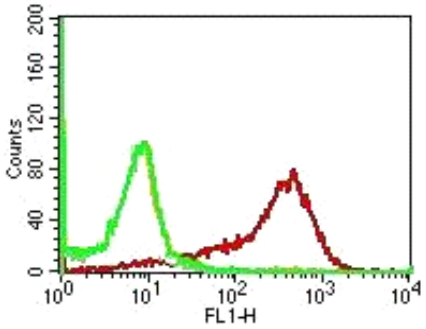
DC-SIGN ("**DC** Specific, **I**CAM-3 **G**rabbing, **N**onintegrin") / CD209 is a type II membrane protein with an external mannose-binding C-type lectin domain. DC-SIGN is expressed by immature and mature dendritic cells (DC). In the skin, DC-SIGN$^+$ DC are exclusively located in the dermis. DC-SIGN binds to ICAM-3 on resting T cells, establishing DC-T cell contact and adaptive immunity. DC-SIGN is a high affinity receptor for HIV gp120, allowing HIV capture and transmission to CD4$^+$ T cells. In addition to HIV, DC-SIGN is a receptor for a number of other viral and cellular pathogens including *Mycobacterium tuberculosis*, and is a major player in microbial evasion of the immune system. (*Geijtenbeek, T and al, Cell, 2000; 100: 587-597*; *van Kooyk Y and al, Nat. Rev. Immunol., 2003; 3: 697-709)*

Clone:	**120C11.01**
Species:	mouse
Specificity:	human (epitope in extracellular domain)
Immunogen:	HeLa cells stably transfected-with human DC-SIGN
Species cross-reactivity:	no cross-reactivity with **human L-SIGN**
Isotype:	IgG2b, κ
Formulation/size:	**Purified**: 100 µg in 200 µl / 50 µg in 100 µl Tris-NaCl pH 8 **Coupled**: 100 µg in 200 µl / 50 µg in 100 µl PBS 50% glycerol

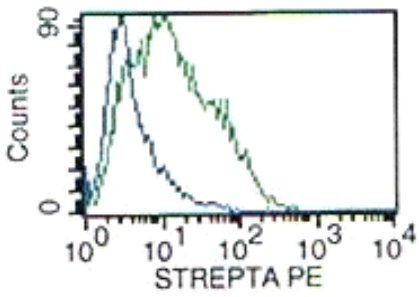
Available formats:

Reference N°		Format	Application tested
50 µg	**100 µg**		
DDX0208P-50	DDX0208P-100	purified	Surface Flow cytometry, HIV gp120 binding
DDX0208A488-50	DDX0208A488-100	Alexa-fluor®488	Surface Flow cytometry , IF
DDX0208A647-50	DDX0208A647-100	Alexa-fluor®647	Surface Flow cytometry
DDX0208B-50	DDX0208B-100	Biotin	*(on request)*

Applications tested: Flow cytometry and gp120-binding blocking studies.



DC-SIGN expression on NIH3T3 cells transfected either with DC-SIGN (red) or L-SIGN (green) With CG Mueller (CNRS Strasbourg) courtesy



HIV gp120 binding on DC-SIGN-transfected Hela cells with (blue) or without (green) blocking activity

Usage recommendation:
*****This monoclonal antibody may be used between 3-20 µg/ml.
*Optimal dilution should be determined by each laboratory for each application.
*Coupled antibody: to maintain RT before use.

HIV-gp120 blocking protocol:

HeLa and HeLa-DC-SIGN were incubated with 100µl of DC-SIGN antibody (3-10µg/ml) during 30' at 37°C. Cells were washed with culture medium during 5' at 1600 rpm, and stained with biotin-gp120 (5µg/ml) during 1h at 37°C (*Immunodiagnostics*). Cells were washed with culture medium during 5' at 1600 rpm followed by staining with PE-conjugated streptavidin (dilution 1/20) during 30' at 4°C (*Becton Dickinson*). After a last washing, cells were analyzed by flow cytometry.

Aliquot storage conditions: **-20°C. KEEP CONTENTS STERILE: no preservative.**
<u>Purified</u> antibodies: avoid repeated freeze/thaw cycles.
<u>Coupled</u> antibodies: glycerol protects from freezing.

Not for use in Humans. For research purpose only

contact@dendritics.net **+33(0)4.72.71.74.03** **www.dendritics.net**