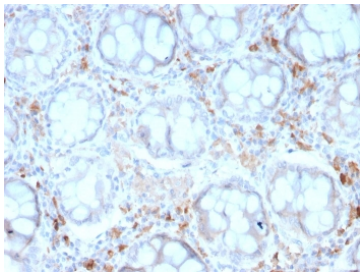
CD209 Antibody / C-Type Lectin Receptor Antibody [clone rC209/1781] (V7840)

Catalog No.	Formulation	Size
V7840-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7840-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7840SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

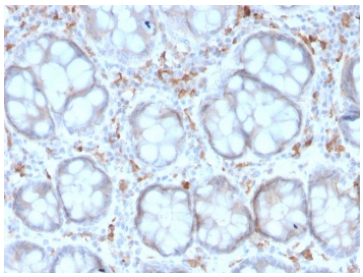
Recombinant MOUSE MONOCLONAL

Bulk quote request

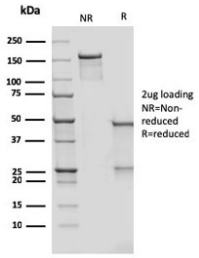
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rC209/1781
Purity	Protein G affinity chromatography
UniProt	Q9NNX6
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This CD209 Antibody / C-Type Lectin Receptor Antibody is available for research use only.



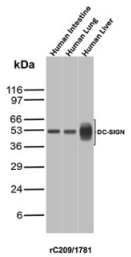
CD209 Antibody rC209/1781 in Human Colon Carcinoma IHC. Immunohistochemistry staining of FFPE human colon carcinoma tissue with CD209 Antibody / C-Type Lectin Receptor Antibody, clone rC209/1781. HIER was performed by boiling tissue sections in 10 mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min. The observed staining demonstrates CD209 expression in human colon carcinoma tissue.



CD209 Antibody rC209/1781 in Human Colon Cancer Tissue IHC. Immunohistochemistry analysis of FFPE human colon cancer tissue with CD209 Antibody / C-Type Lectin Receptor Antibody, clone rC209/1781. Tissue sections underwent HIER by boiling in 10 mM citrate buffer, pH 6, for 10-20 min and were allowed to cool at RT for 20 min before testing. DC-SIGN staining is observed within the human colon cancer tissue.



Purified CD209 Antibody rC209/1781 SDS-PAGE. Gel run analysis of purified, BSA-free CD209 Antibody / C-Type Lectin Receptor Antibody, clone rC209/1781. Analysis of the purified recombinant mouse monoclonal antibody provides confirmation of antibody integrity and purity.



CD209 Antibody in Human Intestine, Lung and Liver WB. Western blot testing of CD209 Antibody / C-Type Lectin Receptor Antibody clone rC209/1781 in human intestine, lung and liver tissue lysates. A prominent band is observed at approximately 50 kDa in intestine and lung, while liver shows a broader, more heterogeneous signal centered around ~50 kDa. The observed migration is consistent with the glycosylated nature of DC-SIGN/CD209, a C-type lectin receptor with a predicted molecular weight of approximately 46 kDa.

Description

CD209 Antibody / C-Type Lectin Receptor Antibody detects CD209, a type II transmembrane glycoprotein also widely known as DC-SIGN. CD209 is expressed by dendritic cells and selected macrophage populations and functions as a C-type lectin receptor involved in carbohydrate recognition, cell adhesion and immune responses. The extracellular region contains a carbohydrate-recognition domain that binds specific glycan structures on both endogenous cells and microorganisms, providing a molecular link between immune-cell interactions and pathogen recognition.

DC-SIGN contains an N-terminal cytoplasmic region, a transmembrane domain, an extracellular neck region composed of tandem repeats and a C-terminal C-type lectin carbohydrate-recognition domain. The neck region contributes to receptor oligomerization, allowing CD209 to engage multivalent carbohydrate ligands with increased avidity. This structural organization supports the receptor's dual functions in recognition of glycosylated ligands and adhesion between immune cells.

CD209 was characterized in part through its interaction with ICAM-3 and contributes to contacts between dendritic cells and T cells. DC-SIGN can also interact with ICAM-2 and is studied in dendritic cell trafficking and immune-cell adhesion. These interactions are relevant to the ability of dendritic cells to capture antigens, migrate between tissues and lymphoid compartments, and communicate with cells of the adaptive immune system.

The C-type lectin receptor activity of DC-SIGN also enables recognition of carbohydrate structures displayed by diverse microorganisms. CD209 is therefore extensively investigated in host-pathogen interactions and innate immune recognition. Depending on the microorganism and biological context, DC-SIGN-mediated binding can contribute to pathogen capture and internalization, while certain pathogens can exploit the receptor during infection. These properties make CD209 relevant to research spanning dendritic cell biology, macrophage function, microbiology and immune regulation.

Clone rC209/1781 is a recombinant mouse monoclonal antibody generated using a recombinant partial human protein as

immunogen. It has been evaluated by immunohistochemistry in FFPE human colon carcinoma tissue. Recombinant production provides a defined antibody sequence and supports consistent performance across manufacturing lots. NSJ Bioreagents supplies antibodies for immunology, dendritic cell and host-pathogen interaction research. A CD209 Antibody can be used to investigate C-type lectin receptor expression, DC-SIGN biology, pathogen recognition and immune-cell adhesion.

For broader research on CD209 expression, dendritic cell biology and pathogen recognition, see our DC-SIGN Antibody / Dendritic Cell Marker Antibody page.

Application Notes

Optimal dilution of the CD209 Antibody / C-Type Lectin Receptor Antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein was used as the immunogen for this recombinant CD209 antibody.

Storage

Store the recombinant CD209 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD209 antibody, C-Type Lectin Receptor antibody, DC-SIGN antibody, Dendritic Cell-Specific ICAM-3-Grabbing Non-Integrin antibody, CLEC4L antibody

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