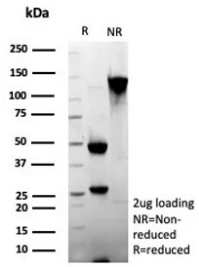
DNGR-1 Antibody / Dendritic Cell Receptor Antibody [clone 1F6] (V8273)

Catalog No.	Formulation	Size
V8273-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8273-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8273SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Purified
Host	Rat
Clonality	Monoclonal (rat origin)
Isotype	Rat IgG1, kappa
Clone Name	1F6
Purity	Protein G affinity chromatography
UniProt	Q8RU4
Applications	Flow cytometry: 1-2ug/10^6 cells in 0.1ml Western blot: 1-2ug/ml Immunofluorescence: 1-2ug/ml
Limitations	This DNGR-1 Antibody / Dendritic Cell Receptor Antibody is available for research use only.



DNGR-1 Antibody SDS-PAGE Analysis. SDS-PAGE analysis of purified, BSA-free DNGR-1 Antibody / Dendritic Cell Receptor Antibody clone 1F6 demonstrates the expected antibody migration pattern under reducing (R) and non-reducing (NR) conditions. Under reducing conditions, prominent bands corresponding to the immunoglobulin heavy and light chains are observed at approximately 50 kDa and 25 kDa, respectively. Under non-reducing conditions, the antibody migrates predominantly as an intact immunoglobulin species at approximately 150 kDa. These results confirm the integrity and purity of clone 1F6 and support its use for research applications targeting DNGR-1 / CLEC9A, a dendritic cell receptor involved in dead-cell sensing, antigen cross-presentation, and immune regulation.

Description

C-Type Lectin Domain Family 9 Member A (CLEC9A) is a transmembrane C-type lectin receptor encoded by the CLEC9A gene and expressed predominantly by specialized dendritic cell populations. The DNGR-1 Antibody is useful for investigating dendritic cell biology, antigen presentation, and immune responses to cellular injury. DNGR-1 is localized to the plasma membrane and is best known for its expression on conventional type 1 dendritic cells (cDC1), a specialized subset of antigen-presenting cells that plays a central role in cross-presentation and activation of cytotoxic T-cell responses. These dendritic cells contribute to anti-viral immunity, anti-tumor immunity, and communication between innate and adaptive immune systems.

DNGR-1 antibody, also referred to as CLEC9A antibody, C-type lectin domain family 9 member A antibody, and dendritic cell NK lectin receptor antibody in the literature, recognizes a receptor that functions as a sensor of cellular damage. Clone 1F6 antibody has been utilized in published studies investigating CLEC9A-positive dendritic cell populations, antigen cross-presentation, and immune responses to tissue injury. DNGR-1 gained significant attention following the discovery that it recognizes filamentous actin exposed by necrotic and damaged cells, allowing dendritic cells to identify sites of tissue damage and efficiently acquire associated antigens.

A defining feature of DNGR-1 biology is its role in antigen cross-presentation. Following recognition of dead-cell material, DNGR-1 promotes routing of antigens into pathways that facilitate presentation on MHC class I molecules and activation of CD8-positive T lymphocytes. This specialized process allows the immune system to generate cytotoxic responses against infected or malignant cells. Because cDC1 dendritic cells are particularly efficient at cross-presentation, DNGR-1 has become one of the most widely used markers for identifying dendritic cell populations associated with cellular immunity and tumor surveillance.

DNGR-1 has also emerged as an important target in vaccine development and immunotherapy research. Numerous studies have explored strategies that direct antigens to CLEC9A-positive dendritic cells to enhance immune activation and improve antigen-specific T-cell responses. The ability to selectively target highly specialized antigen-presenting cells has generated considerable interest in cancer immunotherapy, infectious disease research, and next-generation vaccine design. Published studies utilizing clone 1F6 antibody have contributed to the characterization of CLEC9A-positive dendritic cells and their role in adaptive immune activation.

Beyond its role in antigen presentation, DNGR-1 contributes to coordination of immune responses following tissue damage and cellular stress. By linking recognition of dead-cell material with adaptive immune activation, the receptor helps ensure that important antigens are efficiently processed and presented to the immune system. A DNGR-1 antibody can support studies of dendritic cell biology, antigen cross-presentation, dead-cell sensing, tumor immunity, vaccine targeting, and innate-adaptive immune communication. General antibody-based approaches may be used to evaluate DNGR-1 expression in a variety of research applications. NSJ Bioreagents offers clone 1F6 antibody to support investigations of dendritic cell receptor biology and immune regulation.

Researchers studying antigen cross-presentation, cDC1 biology, and dendritic cell-mediated immune activation may also be interested in our Dendritic Cell Antibody landing page featuring markers involved in dendritic cell identification, antigen uptake, and T-cell priming.

Application Notes

Optimal dilution of the DNGR-1 Antibody / Dendritic Cell Receptor Antibody should be determined by the researcher.

Immunogen

RBL-2H3 cells expressing mouse CLEC9A fused to an HA epitope.

Storage

Store the CLEC9A antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CLEC9A antibody, C-type lectin domain family 9 member A antibody, DNGR1 antibody, Dendritic cell NK lectin receptor antibody, C-type lectin receptor antibody

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