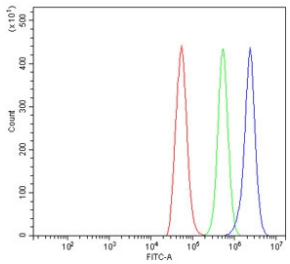
CD226 Antibody / DNAM-1 Polyclonal Antibody (RQ6373)

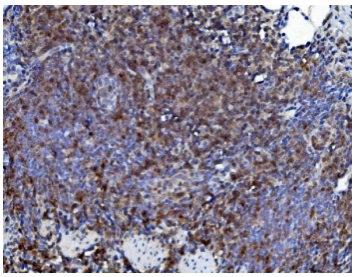
Catalog No.	Formulation	Size
RQ6373	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

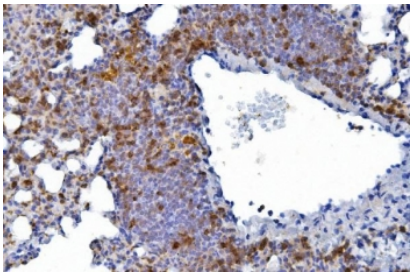
Species Reactivity	Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q8K4F0
RRID	AB_3757100
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This CD226 Antibody / DNAM-1 Polyclonal Antibody is available for research use only.



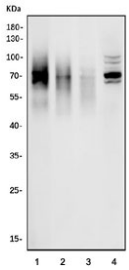
CD226 Antibody by FACS in Rat NRK Cells. Flow cytometry analysis of rat NRK cells using CD226 Antibody at 1 ug per million cells. The DNAM-1 Polyclonal Antibody produces a pronounced rightward fluorescence shift (blue) compared with the isotype control (green) and unstained cells (red). The three populations are clearly separated, demonstrating detection of cell-associated CD226/DNAM-1 by flow cytometry. Cells were blocked with goat serum before antibody incubation to minimize nonspecific binding.



CD226 Antibody by IHC in Rat Lung Lymphoid Tissue. Immunohistochemistry of FFPE rat lung lymphoid tissue using CD226 Antibody. The DNAM-1 Polyclonal Antibody produces widespread brown DAB staining throughout the lymphoid tissue, with heterogeneous cellular labeling and comparatively limited nuclear staining. The staining is particularly prominent in densely populated cellular regions, consistent with the distribution of CD226-associated immunoreactivity within the tissue. Heat-mediated antigen retrieval was performed using EDTA buffer at pH 8.0.



CD226 Antibody by IHC in Mouse Lung. Immunohistochemistry of FFPE mouse lung sections using CD226 Antibody. Strong brown immunoreactivity is visible in cellular regions surrounding pulmonary airway and vascular structures, with additional staining in adjacent lung tissue. The DNAM-1 Polyclonal Antibody produces predominantly non-nuclear labeling, while the surrounding alveolar spaces remain unstained. Heat-mediated antigen retrieval was performed using EDTA buffer at pH 8.0 before antibody incubation.



CD226 Antibody by WB in Rodent Immune Tissues and Cells. Western blot testing of rat spleen (lane 1), mouse spleen (lane 2), mouse thymus (lane 3) and mouse RAW264.7 cell lysates (lane 4) using CD226 Antibody. The DNAM-1 Polyclonal Antibody detects prominent immunoreactive bands in the approximately 70-100 kDa region, with differences in band intensity and migration among the samples. The RAW264.7 lane shows multiple distinct bands in the upper portion of this range. The observed molecular weight variation is compatible with differences in CD226 glycosylation, although the presence of multiple bands does not independently establish their identities.

Description

CD226 Antibody recognizes CD226, an immunoglobulin superfamily cell-surface receptor also known as DNAM-1 (DNAX accessory molecule 1) and PTA1. CD226 is an activating and adhesion-associated receptor involved in immune cell recognition, cytotoxicity and intercellular communication. It is expressed by natural killer (NK) cells, T lymphocytes, monocytes and other immune cell populations. CD226 plays an important role in coordinating immune responses against infected, transformed and otherwise abnormal cells.

CD226 is a type I transmembrane glycoprotein containing two extracellular immunoglobulin-like domains and an intracellular signaling region. Its principal ligands are CD155 (PVR) and CD112 (Nectin-2), which participate in immune recognition and cell adhesion. Engagement of these ligands promotes NK cell cytotoxicity and T cell costimulation, contributing to immune surveillance and cellular activation. The receptor operates within a network of activating and inhibitory pathways that regulate the strength and duration of immune responses.

In NK cells, CD226 promotes recognition and elimination of susceptible target cells through cytotoxic granule release and effector signaling. In T lymphocytes, it contributes to proliferation, differentiation and cytokine production. CD226 shares its ligands with inhibitory receptors, particularly TIGIT, which competes for CD155 and CD112 binding. The balance between CD226-mediated activation and TIGIT-mediated inhibition is an important determinant of lymphocyte function. A DNAM-1 Polyclonal Antibody can support research into these competing immune regulatory mechanisms.

CD226 has attracted considerable attention in cancer immunology because its signaling influences antitumor immune responses. Tumor-associated expression of CD155 and CD112 can promote immune recognition while simultaneously engaging inhibitory receptors that suppress cytotoxic activity. Altered CD226 expression and signaling have been investigated in tumor immune evasion, T cell exhaustion and responses to immune checkpoint therapies. CD226 is also relevant to autoimmune and inflammatory disorders, where dysregulated lymphocyte activation contributes to disease development.

Beyond cancer, CD226 participates in leukocyte adhesion, immune surveillance and communication between immune cells and their targets. Its functional relationship with TIGIT, CD96 and shared ligands makes it an important component of immune checkpoint biology. NSJ Bioreagents provides this DNAM-1 Polyclonal Antibody for research into immune receptor signaling, lymphocyte activation and cellular immune regulation.

An CD226 Antibody can be used to investigate DNAM-1 expression, NK cell function, T cell costimulation, cytotoxic immune responses and the molecular mechanisms regulating immune surveillance.

Explore additional immune cell surface markers and receptors in our CD Antibodies collection.

Application Notes

Optimal dilution of the CD226 Antibody / DNAM-1 Polyclonal Antibody should be determined by the researcher.

Immunogen

Recombinant mouse protein (amino acids E31-L333) was used as the immunogen for the CD226 Antibody.

Storage

After reconstitution, the CD226 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

DNAM-1 antibody, DNAX Accessory Molecule 1 antibody, Platelet and T Cell Activation Antigen 1 antibody, PTA1 antibody, T Cell Lineage-Specific Activation Antigen antibody, DNAX Accessory Molecule-1 antibody

Copyright © NSJ Bioreagents. All rights reserved.