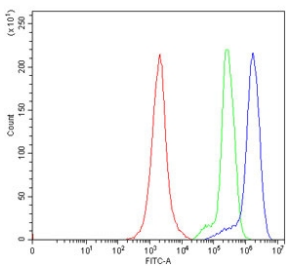
DNAM-1 Antibody / CD226 Polyclonal Antibody (RQ6841)

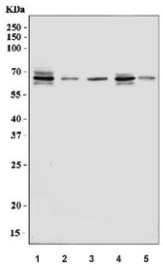
Catalog No.	Formulation	Size
RQ6841	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q15762
Applications	Western blot: 1-2ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This DNAM-1 Antibody / CD226 Polyclonal Antibody is available for research use only.



DNAM-1 Antibody by FACS in Human Jurkat Cells. Flow cytometry analysis of human Jurkat cells using DNAM-1 Antibody at 1 ug per million cells. Cells stained with the CD226 Polyclonal Antibody (blue) demonstrate a pronounced rightward fluorescence shift relative to the isotype control (green) and unstained cells (red). The antibody-stained population is clearly separated from both controls, supporting detection of cell-associated CD226/DNAM-1 in Jurkat cells. Cells were blocked with goat serum before antibody incubation to reduce nonspecific binding.



DNAM-1 Antibody by WB in Human Cell Lines and Mouse Thymus. Western blot testing of human Jurkat (lane 1), HT1080 (lane 2), A549 (lane 3), HEL (lane 4) and mouse thymus (lane 5) lysates using DNAM-1 Antibody. The CD226 Polyclonal Antibody detects prominent immunoreactive bands at approximately 65-70 kDa, with stronger signals in Jurkat and HEL cells and weaker reactivity in some other samples. The observed migration is consistent with glycosylated CD226, whose apparent molecular weight can vary with glycosylation. The dominant bands are concentrated within the expected molecular weight region, with limited additional reactivity visible across the displayed blot.

Description

DNAM-1 Antibody recognizes DNAX accessory molecule 1, also known as CD226 and platelet and T cell activation antigen 1 (PTA1). CD226 is an immunoglobulin superfamily receptor involved in immune cell adhesion, activation and cytotoxic responses. It is expressed by natural killer (NK) cells, T lymphocytes, monocytes, platelets and other immune cell populations. DNAM-1 contributes to the recognition of abnormal cells and helps coordinate immune responses against infected or transformed targets.

CD226 is a type I transmembrane glycoprotein containing two extracellular immunoglobulin-like domains and a cytoplasmic signaling region. Its principal ligands are CD155 (PVR) and CD112 (Nectin-2), which participate in cell adhesion and immune recognition. Binding of these ligands promotes activating signals that contribute to NK cell cytotoxicity and T cell costimulation. CD226 functions alongside other immune receptors to regulate the balance between cellular activation and inhibition.

In NK cells, DNAM-1 promotes recognition and elimination of susceptible target cells through cytotoxic granule release and effector signaling. In T lymphocytes, CD226 contributes to activation, proliferation and cytokine production. Its activity is closely associated with TIGIT, an inhibitory immune checkpoint receptor that competes for shared ligands, particularly CD155. Competition between DNAM-1 and TIGIT influences the strength of lymphocyte responses and is an important mechanism of immune regulation. A CD226 Polyclonal Antibody can support studies examining these receptor interactions and their contribution to immune cell function.

DNAM-1 has attracted considerable interest in cancer immunology because its activating signals contribute to antitumor immune surveillance. Tumor-associated expression of CD155 and CD112 can influence recognition by cytotoxic lymphocytes while simultaneously engaging inhibitory receptors that suppress immune activity. Changes in CD226 expression and signaling have been investigated in tumor immune evasion, T cell exhaustion and responses to immune checkpoint therapies. DNAM-1 is also relevant to autoimmune and inflammatory disorders involving dysregulated lymphocyte activation.

Beyond cancer, CD226 participates in leukocyte adhesion, immune cell communication and regulation of cytotoxic responses. Its functional relationships with TIGIT, CD96 and shared ligands make it an important component of the immune receptor network. NSJ Bioreagents provides this CD226 Polyclonal Antibody for research into lymphocyte activation, immune checkpoint signaling and cellular immune regulation.

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

For an antibody with additional IHC validation, see our CD226 Antibody.

Application Notes

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

Immunogen

Recombinant human protein (amino acids E19-A254) was used as the immunogen for the DNAM-1 antibody.

Storage

After reconstitution, the DNAM-1 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

CD226 antibody, DNAX Accessory Molecule 1 antibody, Platelet and T Cell Activation Antigen 1 antibody, PTA1 antibody, T Cell Lineage-Specific Activation Antigen antibody, CD226 Molecule antibody

Copyright © NSJ Bioreagents. All rights reserved.