Mouse DNAM-1/CD226
Alexa Fluor® 700-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF4436N
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse DNAM-1/CD226 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human DNAM-1/CD226 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse DNAM-1/CD226 Glu19-Pro254 Accession # Q8K4F0
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DNAX accessory molecule-1 (DNAM-1), also known as CD226, is a 65 kDa type I transmembrane glycoprotein that belongs to the immunoglobulin superfamily (1). Mature mouse DNAM has a 236 amino acid (aa) extracellular domain (ECD) that contains two Ig-like C2-set domains, and possesses a 58 aa cytoplasmic region that contains motifs for binding PDZ domains and band 4.1 family proteins (1, 2). Within the ECD, mouse DNAM-1 shares 52% and 86% aa sequence identity with human and rat DNAM-1, respectively. Additional cDNA transcripts of mouse DNAM-1 may give rise to secreted or transmembrane isoforms with ECD deletions. DNAM-1 is expressed on several lymphoid and myeloid cell types and interacts with CD155/PVR and Nectin-2/CD112 (2-4). Ligation of DNAM-1 promotes the activation of NK cells, $CD8^+$ T cells, and mast cells (3-7), induces dendritic cell maturation, initiates megakaryocyte and activated platelet adhesion to vascular endothelial cells, and stimulates monocyte extravasation; conversely, it inhibits the formation of osteoclasts (8-11). Platelet-endothelium interactions that are mediated by DNAM-1 enable the metastasis of tumor cells to the lung (12). On activated, but not resting NK, T, and mast cells, the *cis* association of DNAM-1 with CD18 contributes to tyrosine and serine phosphorylation of DNAM-1 during activation (7, 10, 13-15).

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