

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DNAM-1/CD226 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human DNAM-1/CD226 Glu19-Asn247 Accession # Q15762
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
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

DNAM-1 accessory molecule-1 (DNAM-1), also known as CD226, is a 65 kDa type I transmembrane glycoprotein in the immunoglobulin superfamily (1). Mature human DNAM-1 contains a 236 amino acid (aa) extracellular domain (ECD) with two Ig-like C2-set domains and a 61 aa cytoplasmic region that contains motifs for binding PDZ domains and band 4.1 family proteins (1, 2). Within the ECD, human DNAM-1 shares 50% and 52% aa sequence identity with mouse and rat DNAM-1, respectively. DNAM-1 is expressed on multiple lymphoid and myeloid cells and interacts with CD155/PVR and Nectin-2/CD112 (3, 4). Ligation of DNAM-1 promotes the activation of NK cells, CD8⁺ T cells, and mast cells (2-6), dendritic cell maturation, megakaryocyte and activated platelet adhesion to vascular endothelial cells, and monocyte extravasation; it inhibits the formation of osteoclasts (7-10). Platelet-endothelium interactions mediated by DNAM-1 enable the metastasis of tumor cells to the lung (11). In activated, but not in resting NK, T, and mast cells, the *cis* association of DNAM-1 with CD18 contributes to the tyrosine and serine phosphorylation of DNAM-1 during activation (6, 9, 12-14).

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