

DESCRIPTION

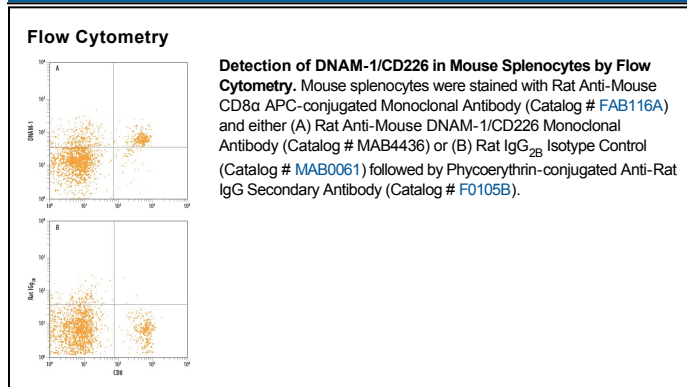
Species Reactivity	Mouse
Specificity	Detects mouse DNAM-1/CD226 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant human DNAM-1/CD226 is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 838216
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse DNAM-1/CD226 Met1-Pro254 Accession # Q8K4F0
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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).

References:

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