

**DESCRIPTION**

<b>Source</b>	Mouse myeloma cell line, NS0-derived		
	Mouse DNAM-1/CD226 (Glu19-Pro254) Accession # Q8K4F0	IEGRMDP	Mouse IgG <sub>2A</sub> (Glu98-Lys330)
	N-terminus		C-terminus
<b>N-terminal Sequence Analysis</b>	Glu19		
<b>Predicted Molecular Mass</b>	53.9 kDa		

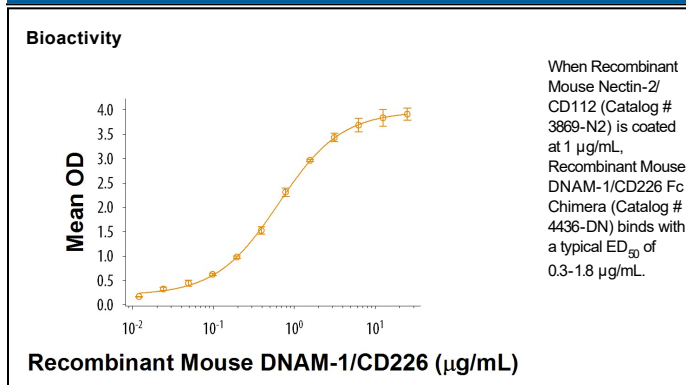
**SPECIFICATIONS**

<b>SDS-PAGE</b>	70-90 kDa, reducing conditions
<b>Activity</b>	Measured by its binding ability in a functional ELISA. When Recombinant Mouse Nectin-2/CD112 (Catalog # 3869-N2) is coated at 1 µg/mL, Recombinant Mouse DNAM-1/CD226 Fc Chimera binds with a typical ED <sub>50</sub> of 0.3-1.8 µg/mL.
<b>Endotoxin Level</b>	<0.01 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>80%, by SDS-PAGE under reducing conditions and visualized by silver stain.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 500 µg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**DATA**



**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-1 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<sup>+</sup> 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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