

Active Recombinant Human CD226 protein, His/Avi-tagged, Biotinylated

Cat. No. CD226-051H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Recombinant Human CD226(Glu19-Asn247) protein, fused to His/Avi tag at the C-terminus, was expressed in HEK293 cells .
Species	Human
Source	HEK293
ProteinLength	Glu19-Asn247
Description	DNAX 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 can enable the metastasis of tumor cells to the lung (11). CD96 competes with DNAM-1 for binding to CD155 and blocks DNAM-1 mediated NK cell activation (12). In activated, but not in resting NK, T, and

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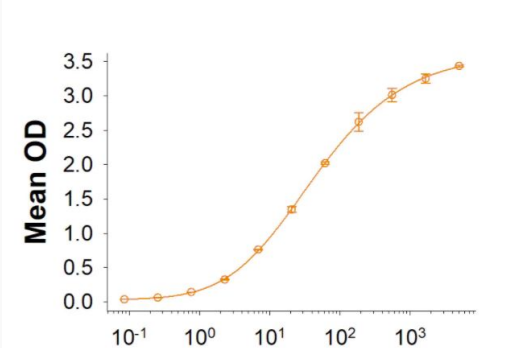
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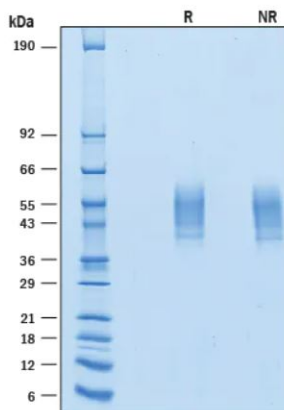
	mast cells, the cis association of DNAM-1 with CD18 contributes to the tyrosine and serine phosphorylation of DNAM-1 during activation (6, 9, 13-15).
Predicted N Terminal	Glu19
Form	Supplied as a 0.2 µm filtered solution in PBS.
Bio-activity	The biotin to protein ratio is greater than 0.7 as determined by the HABA assay. Measured by its binding ability in a functional ELISA. When 250 ng/mL of Biotinylated Recombinant Human CD226 His-tag Avi-tag protein is immobilized, it binds to Recombinant Human PVR Fc Chimera with an ED50 of 20-100 ng/mL.
Molecular Mass	35-60 kDa, under reducing conditions
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Bioactivity
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after opening. 3 months, -20 to -70 °C under sterile conditions after opening.
Conjugation	Biotin
GENE INFORMATION	
Gene Name	CD226 CD226 molecule [Homo sapiens]

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Official Symbol	CD226
Synonyms	CD226; CD226 molecule; CD226 antigen; DNAM 1; DNAM1; PTA1; TLISA1; adhesion glycoprotein; DNAX accessory molecule 1; DNAX accessory molecule-1; platelet and T cell activation antigen 1; T lineage-specific activation antigen 1 antigen; DNAM-1;
Gene ID	10666
mRNA Refseq	NM_006566
Protein Refseq	NP_006557
MIM	605397
UniProt ID	Q15762
Binding Activity	

SDS-PAGE

2 µg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.

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