

# DNAM-1/CD226

Catalog # PVGS1618

## Product Information

---

<b>Primary Accession Species</b>	<a href="#">Q15762</a> Human
<b>Sequence</b>	Glu19-Asn247
<b>Purity</b>	> 90% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	
<b>Biological Activity</b>	DNAM-1/CD226, His, Human can bind with CHO-K1/aAPC/CD155 Clone by FACS analysis.
<b>Expression System</b>	HEK 293
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Additional Information

---

<b>Gene ID</b>	10666
<b>Other Names</b>	CD226 antigen, DNAX accessory molecule 1, DNAM-1, CD226, CD226, DNAM1
<b>Target Background</b>	CD226 (Cluster of Differentiation 226), also known as PTA1 (outdated term, 'platelet and T cell activation antigen 1')[5] or DNAM-1 (DNAX Accessory Molecule-1), is a ~65 kDa glycoprotein expressed on the surface of natural killer cells, platelets, monocytes and a subset of T cells. It is a member of the immunoglobulin superfamily. This protein is involved in intercellular adhesion, lymphocyte signaling, cytotoxicity and lymphokine secretion mediated by cytotoxic T-lymphocyte (CTL) and NK cell. It is the cell surface receptor for NECTIN2 and its main ligands are CD112 and CD155. It stimulates T-cell proliferation and cytokine production, including that of IL-2, IL-5, IL-10, IL-13, and IFN $\gamma$ upon ligand binding.

## Protein Information

---

<b>Name</b>	CD226
<b>Synonyms</b>	DNAM1
<b>Function</b>	<p>Cell surface receptor that plays an important role in the immune system, particularly in intercellular adhesion, lymphocyte signaling, cytotoxicity and lymphokine secretion mediated by cytotoxic T-cells and NK cells (PubMed:<a href="#">8673704</a>, PubMed:<a href="#">9712030</a>). Functions as a costimulatory receptor upon recognition of target cells, such as virus- infected or tumor cells. Upon binding to its ligands PVR/CD155 or NECTIN2/CD112 on target cells, promotes the cytotoxic activity of NK cells and CTLs, enhancing their ability to kill these cells (PubMed:<a href="#">26755705</a>, PubMed:<a href="#">31253644</a>, PubMed:<a href="#">30591568</a>).</p> <p>Mechanistically, phosphorylation by Src kinases such as LYN or FYN, enables binding to adapter GRB2, leading to activation of VAV1, PI3K and PLCG1. Promotes also activation of kinases ERK and AKT, as well as calcium fluxes (By similarity).</p>
<b>Cellular Location</b>	Cell membrane; Single-pass type I membrane protein. Note=Localizes to lipid rafts.
<b>Tissue Location</b>	Expressed by peripheral blood T-lymphocytes.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.