

**DNAM-1/CD226**  
**Catalog # PVGS1601****Specification**

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**DNAM-1/CD226 - Product Information**

Primary Accession [Q15762](#)  
**Species**  
Human

**Sequence**  
Glu19-Asn247

**Purity**  
> 95% as analyzed by SDS-PAGE

**Endotoxin Level**  
< 1 EU/ µg of protein by gel clotting method

**Biological Activity**  
Immobilized Rhesus macaque CD155/PVR Protein, His Tag at 1.0 µg/ml (100 µl/well) can bind DNAM-1/CD226, hFc, Human with an EC<sub>50</sub> of 0.871 µg/ml when detected by Mouse Anti-Human IgG Fc-HRP.

**Expression System**  
HEK 293

Formulation **Lyophilized from a 0.2 µm filtered solution in PBS.**

**Reconstitution**  
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 µg/ml.

**Storage & Stability**  
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.

**DNAM-1/CD226 - Additional Information**

**Gene ID** 10666

**Other Names**  
CD226 antigen, DNAX accessory molecule 1, DNAM-1, CD226, CD226, DNAM1

**Target Background**  
DNAM-1 (DNAX accessory molecule-1), also known as CD226, platelet and T cell activation antigen 1 (PTA1) and TLI1A1, is a member of the Ig superfamily containing two Ig-like domains of the V set and is encoded by a gene on human chromosome 18q22.3. DNAM-1 is an activating receptor

expressed on natural killer (NK) cells, CD8+ T cells, and other immune cells. Upon recognition of its ligands, CD155 and CD112, DNAM-1 promotes NK cell-mediated elimination of transformed and virus-infected cells. It also has a key role in expansion and maintenance of virus-specific memory NK cells. DNAM-1 is the cell surface receptor of NECTIN2. Upon ligand binding, it stimulates T cell proliferation and cytokine production, including that of IL2, IL5, IL10, IL13 and IFNG.

## **DNAM-1/CD226 - Protein Information**

**Name** CD226

**Synonyms** DNAM1

### **Function**

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="http://www.uniprot.org/citations/8673704" target="\_blank">8673704</a>, PubMed:<a href="http://www.uniprot.org/citations/9712030" target="\_blank">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="http://www.uniprot.org/citations/26755705" target="\_blank">26755705</a>, PubMed:<a href="http://www.uniprot.org/citations/31253644" target="\_blank">31253644</a>, PubMed:<a href="http://www.uniprot.org/citations/30591568" target="\_blank">30591568</a>). Mechanistically, phosphorylation by Src kinases such as LYN of 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).

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Note=Localizes to lipid rafts.

### **Tissue Location**

Expressed by peripheral blood T-lymphocytes.

## **DNAM-1/CD226 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **DNAM-1/CD226 - Images**