

### PVR/CD155

Catalog # PVGS1547

## **Specification**

### **PVR/CD155 - Product Information**

Primary Accession **Species** Human P15151

**Sequence** 

Trp21-Asn343

**Purity** 

> 95% as analyzed by SDS-PAGE

**Endotoxin Level** 

< 0.2 EU/  $\mu g$  of protein by gel clotting method

**Biological Activity** 

Immobilized CD155 His, Human (Cat. No.: Z03436) at 5.0  $\mu$ g/ml (100  $\mu$ l/well) can bind TIGIT Fc, Human (Cat. No.: Z03439) with a linear range of 2.5-10.0  $\mu$ g/ml.

**Expression System** 

**HEK 293** 

Formulation

Lyophilized from a 0.2 μm filtered solution in PBS, 5% trehalose and mannitol.

### 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  $ddH_2O$  or PBS up to  $100 \mu g/ml$ .

### 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.

# **PVR/CD155 - Additional Information**

**Gene ID 5817** 

**Other Names** 

Poliovirus receptor, Nectin-like protein 5, NECL-5, CD155, PVR, PVS

## **Target Background**

PVR is a Type I transmembrane glycoprotein in the immunoglobulin superfamily. Commonly known as Poliovirus Receptor (PVR) due to its involvement in the cellular poliovirus infection in primates. PVR's normal cellular function is in the establishment of intercellular adherens junctions between epithelial cells. PVR/CD155 was originally isolated based on its ability to mediate polio virus



attachment to host cells. The full length (or PVR alpha isoform) is synthesized as a 417 amino acid (aa) precursor that contains a 20aa signal sequence, a 323aa extracellular region, a 24aa TM segment and a 50aa cytoplasmic tail. PVR binds other molecules including Vitronectin, Nectin-3, DNAM-1/CD226, CD96, and TIGIT but does not bind homotypically. PVR is up-regulated on endothelial cells by IFN-gamma and is highly expressed on immature thymocytes, lymph node dendritic cells, and tumor cells of epithelial and neuronal origin.

## **PVR/CD155 - Protein Information**

Name PVR

**Synonyms PVS** 

#### **Function**

Mediates NK cell adhesion and triggers NK cell effector functions. Binds two different NK cell receptors: CD96 and CD226. These interactions accumulates at the cell-cell contact site, leading to the formation of a mature immunological synapse between NK cell and target cell. This may trigger adhesion and secretion of lytic granules and IFN-gamma and activate cytotoxicity of activated NK cells. May also promote NK cell-target cell modular exchange, and PVR transfer to the NK cell. This transfer is more important in some tumor cells expressing a lot of PVR, and may trigger fratricide NK cell activation, providing tumors with a mechanism of immunoevasion. Plays a role in mediating tumor cell invasion and migration.

### **Cellular Location**

[Isoform Alpha]: Cell membrane; Single-pass type I membrane protein [Isoform Beta]: Secreted.

### **PVR/CD155 - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PVR/CD155 - Images