

**DESCRIPTION**

<b>Source</b>	Human embryonic kidney cell, HEK293-derived		
	Human PVRIG (Thr41 & Glu43-Leu172) Accession # Q6DKI7	IEGRMD	Human IgG <sub>1</sub> (Pro100-Lys330)
	N-terminus		C-terminus
<b>N-terminal Sequence Analysis</b>	Thr41 & Glu43		
<b>Structure / Form</b>	Disulfide-linked homodimer		
<b>Predicted Molecular Mass</b>	40 kDa		

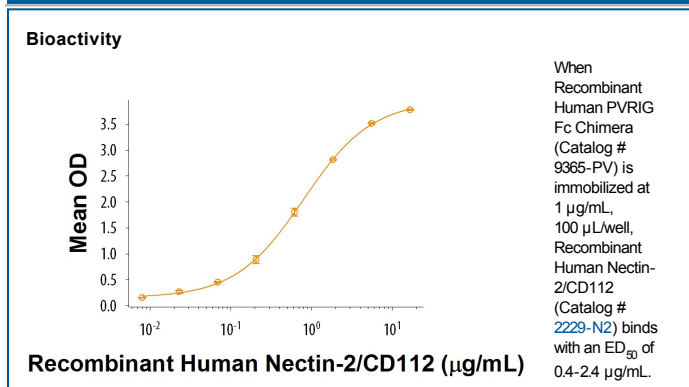
**SPECIFICATIONS**

<b>SDS-PAGE</b>	51-57 kDa, reducing conditions
<b>Activity</b>	Measured by its binding ability in a functional ELISA. When Recombinant Human PVRIG Fc Chimera is immobilized at 1 µg/mL, 100 µL/well, the concentration of Recombinant Human Nectin-2/CD112 (Catalog # 2229-N2) that produces 50% of the optimal binding response is 0.4-2.4 µg/mL.
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 500 µg/mL in 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>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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**

Human PVRIG (poliovirus receptor related immunoglobulin domain-containing protein), also known as CD112 receptor (CD112R), is an approximately 34 kDa single transmembrane protein in the poliovirus receptor-like protein (PVR) family (1). It is composed of a single extracellular IgV domain, one transmembrane domain, and a long intracellular domain. The intracellular domain contains two tyrosine residues, one within an ITIM-like motif that is a potential docking site for phosphatases (1). The extracellular domain sequence of human and mouse PVRIG have approximately 65% similarity. The human PVRIG gene is preferentially expressed in lymphocytes, such as T cells and NK cells, but not in monocyte derived dendritic cells (1). PVRIG functions as a cell surface receptor for Nectin-2/CD112, a cell surface protein that is widely expressed on antigen-presenting cells and tumor cells. Disrupting the PVRIG/Nectin-2 interaction enhances human T cell response, suggesting PVRIG is a novel checkpoint for human T cells (1).

**References:**

1. Zhu, Y., *et al.* (2016) J. Exp. Med. **213**:167.