

DESCRIPTION

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

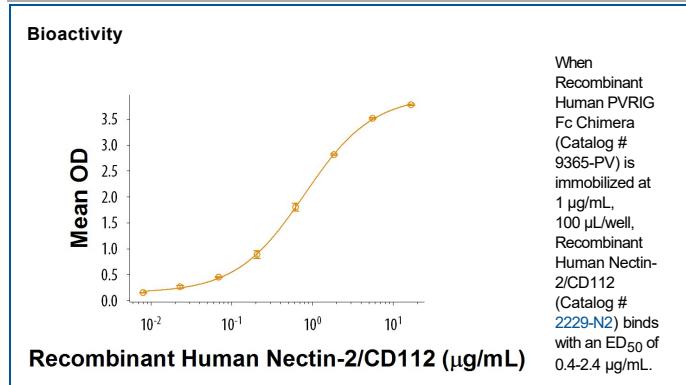
SPECIFICATIONS

SDS-PAGE	51-57 kDa, reducing conditions
Activity	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.
Endotoxin Level	<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.
Formulation	Lyophilized from a 0.2 µm filtered solution in MOPS, NaCl and PEG with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 250 µg/mL in sterile water.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after reconstitution.

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:

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