



# Recombinant Protein Technical Manual

## Recombinant Human Nectin-3/PVRL3 Protein (His Tag)(Active)

RPES0406

### Product Data:

**Product SKU:** RPES0406

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_056295.1

### Protein Information:

**Molecular Mass:** 39.3 kDa

**AP Molecular Mass:** 65-75 kDa

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized recombinant human PVRL3 at 1 µg/ml (100 µl/well) can bind biotinylated Nectin with a linear range of 6.4-800 ng/ml.2. Immobilized recombinant human PVRL3 at 1 µg/ml (100 µl/well) can bind Nectin/ Fc chimera with a linear range of 0.156-5 ng/ml.

**Purity:** > 98 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Poliovirus Receptor-Related Protein 3; CDw113; Nectin-3; CD113; PVRL3; PRR3;PVRR3

## Immunogen Information:

**Sequence:** Met 1-Asp 400

## Background:

Poliovirus receptor-related 3 (PVRL3), also known as Nectin-3 and CD113, is a member of the nectin family. PVRL3/Nectin-3 is an 83 kDa, type I transmembrane glycoprotein. Its precursor is 549 amino acids (aa) in length and contains an extended signal sequence of 57 aa, an extracellular domain (ECD) of 347 aa, a transmembrane segment of 21 aa, and a cytoplasmic region of 124 aa. Nectin-3 has three splicing variants, nectin-3alpha (biggest), -3beta (middle), and -3gamma (smallest). It is predominantly expressed in testis and placenta as well as in various cell lines, including epithelial cell lines. PVRL3/Nectin-3 plays a role in cell-cell adhesion through heterophilic trans-interactions with nectin-like proteins or nectins, such as trans-interaction with PVRL2/Nectin-2 at Sertoli-spermatid junctions. PVRL3/Nectin-3 is thus involved in the formation of cell-cell junctions, including adherens junctions and synapses. It has been shown to induce endocytosis-mediated down-regulation of PVR from the cell surface, resulting in reduction of cell movement and proliferation.