# Human CD113 / Nectin-3 / PVRL3 Protein (His Tag)

Catalog Number: 10852-H08H



## **General Information**

#### Gene Name Synonym:

CD113; CDw113; DKFZp566B0846; FLJ90624; nectin-3; PPR3; PRR3; PVRL3; PVRR3

#### **Protein Construction:**

A DNA sequence encoding the extracellular domain of human PVRL3 (NP\_056295.1) (Met 1-Asp 400) was expressed, with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 98 % as determined by SDS-PAGE

**Bio Activity:** 

Immobilized Human Nectin 3 His(Cat:10197-H08H) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human PVRL1/NECTIN1 hFc (Cat:11611-H02H), the EC<sub>50</sub> of Human PVRL1/NECTIN1 hFc (Cat:11611-H02H) is 3-24 ng/mL.

#### **Endotoxin:**

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gly 58

### **Molecular Mass:**

The secreted recombinant human PVRL3 comprises 354 amino acids and has a predicted molecular mass of 39.3 kDa. As a result of glycosylation, rhPVRL3 migrates as an approximately 65-75 kDa band in SDS-PAGE under reducing conditions.

## Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

## Storage:

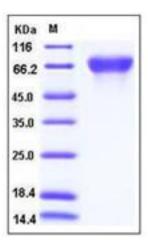
Store it under sterile conditions at  $-20^{\circ}$ C to  $-80^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

## Avoid repeated freeze-thaw cycles.

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



## **Protein Description**

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.

## References

Satoh-Horikawa, <em>et al.</em> (2000). Nectin-3, a new member of immunoglobulin-like cell adhesion molecules that shows homophilic and heterophilic cell-cell adhesion activities. J Biol Chem (UNITED STATES) . 275 (14): 10291-9.
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Reymond N, <em>et al.
(2000). Human nectin3/PRR3: a novel member of the PVR/PRR/nectin family that interacts with afadin. Gene (NETHERLANDS). 255 (2): 347-55.

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