Biotinylated Human Nectin-3 / CD113 Protein, Fc,Avitag™

Catalog # PV3-H82F3

Synonym

CD113,Nectin-3,PVRL3

Source

Biotinylated Human Nectin-3, Fc,Avitag(PV3-H82F3) is expressed from human 293 cells (HEK293). It contains AA Gly 58 - Asp 400 (Accession # Q9NQS3-1).
Predicted N-terminus: Leu 56 & Gly 58

Molecular Characterization

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 66.1 kDa. The protein migrates as 80-110 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in
Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

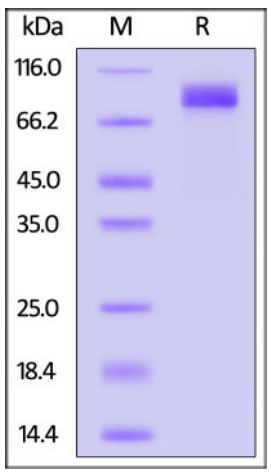
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

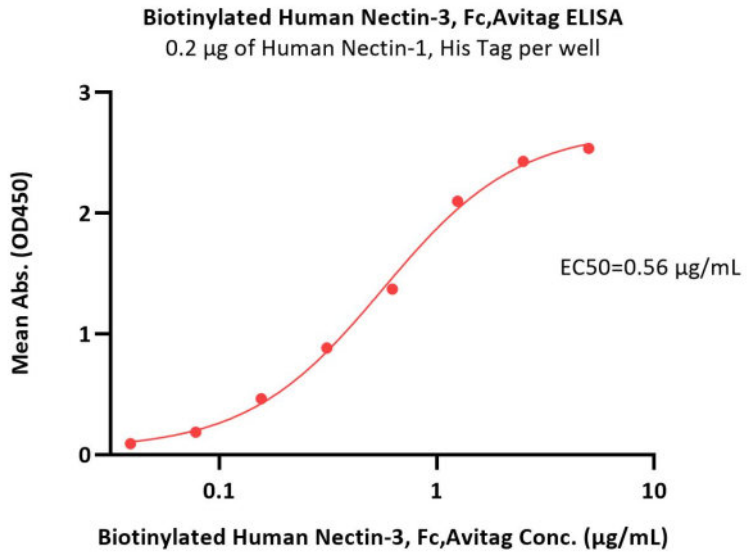
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

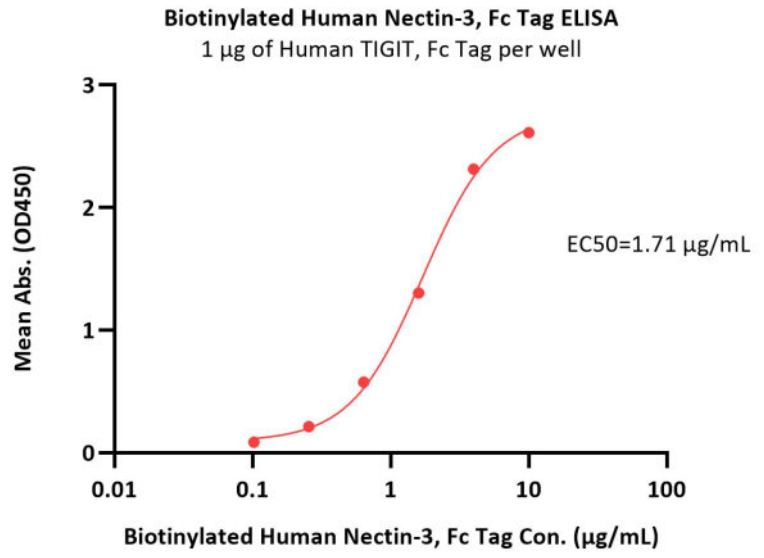


Biotinylated Human Nectin-3, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human Nectin-1, His Tag (Cat. No. PV1-H5223) at 2 μg/mL (100 μL/well) can bind Biotinylated Human Nectin-3, Fc,Avitag (Cat. No. PV3-H82F3) with a linear range of 0.078-0.625 μg/mL (QC tested).



Immobilized Human TIGIT, Fc Tag (Cat. No. TIT-H5254) at 10 μg/mL (100 μL/well) can bind Biotinylated Human Nectin-3, Fc,Avitag (Cat. No. PV3-H82F3) with a linear range of 0.102-4 μg/mL (Routinely tested).

Background

Poliovirus receptor-related 3 (PVRL3), also known as nectin-3 and CD113, is a human protein of the immunoglobulin superfamily which forms part of adherens junctions. Nectins are immunoglobulin-like adhesion molecules that interact with afadin (AF6; MIM 159559). Afadin is an actin filament-binding protein that connects nectins to the actin cytoskeleton. The nectin-afadin system organizes adherens junctions cooperatively with the cadherin system in epithelial cells. PVRL3 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. Furthermore, PVRL3 induces endocytosis-mediated down-regulation of PVR from the cell surface, resulting in reduction of cell movement and proliferation.

Clinical and Translational Updates