Biotinylated Human Nectin-2 / CD112 Protein, Fc,Avitag™ (HPLC verified)





Synonym

CD112,Nectin-2,PVRL2

Source

Biotinylated Human Nectin-2, Fc,Avitag(CD2-H82F8) is expressed from human 293 cells (HEK293). It contains AA Gln 32 - Leu 360 (Accession # Q92692-2). Predicted N-terminus: Gln 32

Molecular Characterization

Nectin-2(Gln 32 - Leu 360) Q92692-2	Fc(Pro 100 - Lys 330) P01857	Avi

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

The protein has a calculated MW of 64.0 kDa. The protein migrates as 66 kDa under reducing (R) condition, and 130 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

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

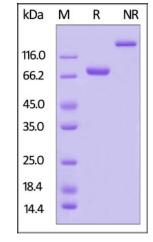
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

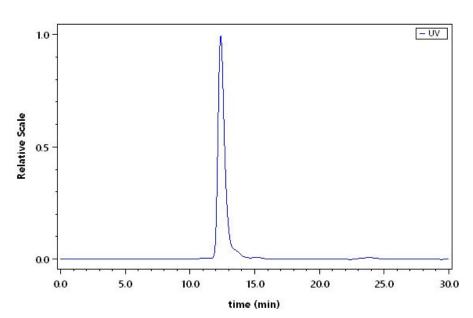
SDS-PAGE



Biotinylated Human Nectin-2, Fc, Avitag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

SEC-HPLC



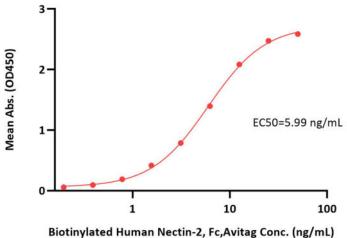
The purity of Biotinylated Human Nectin-2, Fc, Avitag (Cat. No. CD2-H82F8) was greater than 90% as determined by SEC-HPLC.



Biotinylated Human Nectin-2, Fc, Avitag ELISA

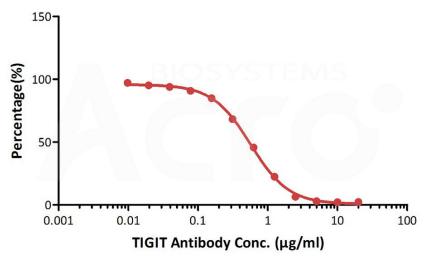
0.2 μg of Human PVRIG, Mouse IgG2a Fc Tag, low endotoxin per well

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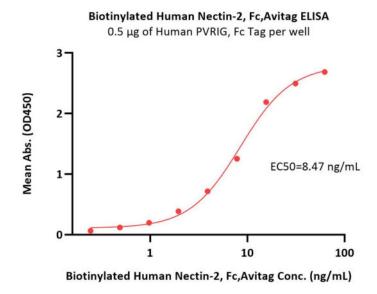


Immobilized Human PVRIG, Mouse IgG2a Fc Tag, low endotoxin at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human Nectin-2, Fc,Avitag (Cat. No. CD2-H82F8) with a linear range of 0.2-13 ng/mL (QC tested).

TIGIT: CD112 Inhibitor Screening ELISA Assay Pair



Serial dilutions of TIGIT antibody (1:2 serial dilutions, from 20 μ g/mL to 0.0097 μ g/mL) were added into Human TIGIT, Mouse IgG2a Fc Tag (Cat. No. TIT-H5253): Biotinylated Human Nectin-2, Fc,Avitag (Cat. No. CD2-H82F8) binding reactions. The assay was performed according to the above described protocol. Background was subtracted from data points before curve fitting.



Immobilized Human PVRIG, Fc Tag (Cat. No. PVG-H5257) at 5 μ g/mL (100 μ L/well) can bind Biotinylated Human Nectin-2, Fc,Avitag (Cat. No. CD2-H82F8) with a linear range of 0.2-16 ng/mL (Routinely tested).

Background

Poliovirus receptor-related 2 (PVRL2) is also known as nectin-2 and CD112 (formerly herpesvirus entry mediator B, HVEB), which is a human plasma membrane glycoprotein. PVRL2 is one of the plasma membrane components of adherens junctions. PVRL2 also serves as an entry for certain mutant strains of herpes simplex virus and pseudorabies virus, and it is involved in cell to cell spreading of these viruses. Variations in PVRL2 gene have been associated with differences in the severity of multiple sclerosis. Also, PVRL2 binds with low affinity to TIGIT. Furthermore, PVRL2 acts as a receptor for herpes simplex virus 1 (HHV-1) mutant Rid1, herpes simplex virus 1 (HHV-2) and pseudorabies virus (PRV).

