

Bioactive, Recombinant Human Nectin-3 / CD113 Protein Dimer, His-

Avi Tag

Product Code: CSP-25196-03 For Research Use Only (RUO)

#### **Protein Name**

Nectin-3

## Alternate Name(s)

poliovirus receptor-related 3, PVRL3, cluster of differentiation 113, CD113, nectin3, CDW113, PPR3, PRR3, PVRR3, nectin cell adhesion molecule 3

#### **Protein Construct**

Nectin-3 dimer protein contains a Nectin-3 extracellular domain (UniProt# Q9NQS3) fused with a proprietary cis-dimer motif followed by a tandem His-Avi tag at the Cterminus. Expressed in HEK293T cell line.

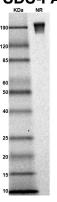
#### **SDS-Page Molecular Weight**

96 kDa. The migration range of the heterodimer protein with glycosylation under non-reducing condition is ~190 kDa on SDS PAGE.

#### **Shipping Conditions**

Frozen Dry Ice

# SDS-PAGE



MW: Molecular Weight marker reduced condition NR: Nectin-3 dimer under non-reduced condition

The migration range of the heterodimer protein with glycosylation under non-reducing condition is ~190 kDa on SDS PAGE.

## **Expression Host**

HEK293T

## **Purity**

Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

### **Amino Acid Range**

1: G58-T404

#### **Formulation**

0.22µm filtered PBS, pH 7.4

## Stability & Storage

-80°C



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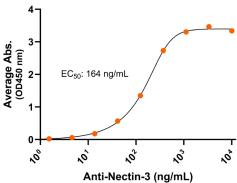
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# **Bioactivity – Antibody Binding**

## Human Nectin-3-His-Avi dimer, ELISA

0.2µg of Nectin-3 protein dimer per well

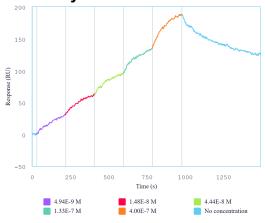


Immobilized human Nectin-3 protein dimer, His-Avi tag (Cat. No. CSP-25196-03) at 2 µg/mL (100 µL/well) can bind antihuman Nectin-3 monoclonal antibody with half maximal

effective concentration (EC50) range of 82-327.8 ng/mL (QC

# Bioactivity - SPR

tested).



Immobilized human Nectin-1 protein dimer, His-Avi tag (Cat. No. CSP-25195-03) can bind human Nectin-3 protein dimer, His-Avi tag (Cat. No. CSP-25196-03) with a KD of 3-11.8 nM as determined by LSPR (Nicoya Alto).

# Bioactivity – Ligand Binding ~i:143:200~



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## Background

Human Nectin-3 is a type 1 integral membrane glycoprotein that can form a homo-cis dimer on the cell membrane. Nectin-3 is also known as poliovirus receptor-related 3 (PVRL3) and cluster of differentiation 113 (CD113). Nectin-3 contains an extracellular domain with three immunoglobulin-like (Ig-like) domains. Nectin-3 interacts with Nectin-1. Nectin-1 and Nectin-3 are expressed in neuronal tissue and unlike many other cellular adhesion molecules, they do not distribute evenly. Nectin-3 is primarily found on the dendritic side and Nectin-1 is primarily found on the axonal side. The interaction of Nectin-1 with Nectin-3 has been found to be essential for proper morphogenesis of the eye. Additionally, Nectin-3 is highly expressed in epithelial cancer cells of 80% of patients with human lung adenocarcinoma. Therefore, a recombinant protein mimicking the Nectin-3 dimer conformation can be crucial for cancer therapeutic discovery.