

#### Protein Name

Nectin-1

#### Expression Host

HEK293T

#### Alternate Name(s)

Poliovirus receptor-related 1, PVRL1, cluster of differentiation 111, CD111, herpesvirus entry mediator C, HVEC, nectin1, CLPED1, ED4, HlgR, HV1S, OFC7, PRR, PRR1, PVRR, PVRR1, SK-12, nectin cell adhesion molecule 1

#### Purity

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

#### Protein Construct

Nectin-1 dimer protein contains a Nectin-1 extracellular domain (UniProt# Q15223) fused with a proprietary cis-dimer motif followed by a tandem His-Avi tag at the C-terminus. Expressed in HEK293T cell line.

#### Amino Acid Range

1: Q31-A355

#### SDS-Page Molecular Weight

92 kDa. The migration range of the heterodimer protein with glycosylation under non-reducing condition is between 120 and 190 kDa on SDS PAGE.

#### Formulation

0.22µm filtered PBS, pH 7.4

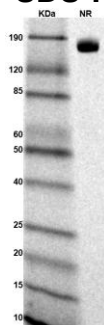
#### Shipping Conditions

Frozen Dry Ice

#### Stability & Storage

-80°C

#### SDS-PAGE



MW: Molecular Weight marker reduced condition

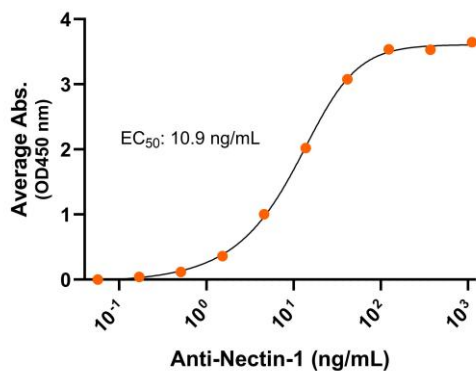
NR: Nectin-1 dimer under non-reduced condition

The migration range of the heterodimer protein with glycosylation under non-reducing condition is between 120 and 190 kDa on SDS PAGE.

## Bioactivity – Antibody Binding

### Human Nectin-1-His-Avi dimer, ELISA

0.2 µg of Nectin-1 protein dimer per well

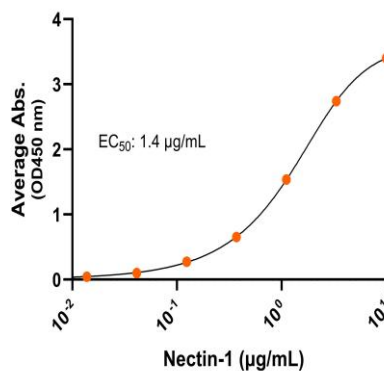


Immobilized human Nectin-1 protein dimer, His-Avi tag (Cat. No. CSP-25195-03) at 2 µg/mL (100 µL/well) can bind anti-human Nectin-1 monoclonal antibody with half maximal effective concentration (EC<sub>50</sub>) range of 5.5-21.8 ng/mL (QC tested).

## Bioactivity – Ligand Binding

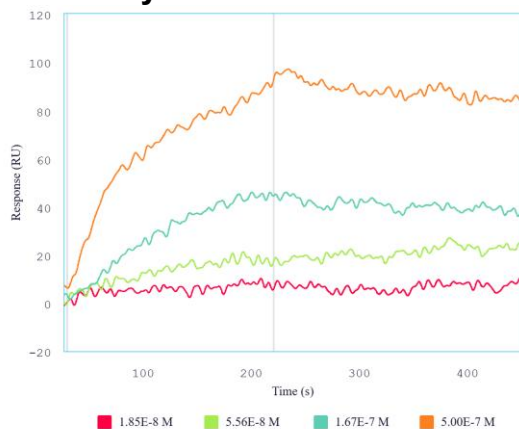
### Human Nectin-1-His-Avi dimer / Nectin-4-His dimer, ELISA

0.2 µg of Nectin-4 protein dimer per well



Immobilized human Nectin-4 protein dimer, His tag (Cat. No. CSP-24016) at 2 µg/mL (100 µL/well) can bind human Nectin-1 protein dimer, His-Avi tag (Cat. No. CSP-25195-03) with half maximal effective concentration (EC<sub>50</sub>) range of 0.7-2.8 µg/mL (QC tested).

## Bioactivity – SPR



Immobilized human Nectin-1 protein dimer, His-Avi tag (Cat. No. CSP-25195-03) can bind human Nectin-4 protein dimer, His tag (Cat. No. CSP-24016) with a K<sub>D</sub> of 8.8-35 nM as determined by LSPR (Nicoya Alto).



Bioactive, Recombinant Human Nectin-1 / CD111 Protein Dimer, His-Avi Tag  
Product Code: CSP-25195-03  
For Research Use Only (RUO)

## Background

Human Nectin-1 is a type 1 integral membrane glycoprotein that can form a homo-cis dimer on the cell membrane. Nectin-1 is also known as Poliovirus receptor-related 1 (PVRL1), cluster of differentiation 111 (CD111), and herpesvirus entry mediator C (HVEC). Nectin-1 contains an extracellular domain with three immunoglobulin-like (Ig-like) domains. Nectin-1 interacts with both Nectin-4 and Nectin-3. Nectin-1 and Nectin-3 are expressed in neuronal tissue and unlike many other cellular adhesion molecules, they do not distribute evenly. Nectin-1 is primarily found on the axonal side and Nectin-3 is primarily found on the dendritic side. The interaction of Nectin-1 with Nectin-3 has been found to be essential for proper morphogenesis of the eye. Nectin-1 also functions as the entry receptor for Herpes Simplex Viruses 1 and 2 through interaction with glycoprotein D on the viral envelope. Therefore, a recombinant protein mimicking the Nectin-1 dimer conformation can be crucial for therapeutic discovery.