

## Recombinant Human NECTIN1 Protein, C-hFc-tagged, Biotinylated

## **Product Information**

Cat IMP-4906

Official Symbol NECTIN1

Product Overview Recombinant human PVRL1 isoform 1 (NP\_002846.3) extracellular domain

(Met 1-Thr 334) was was fused with the Fc region of human IgG1 at the C-

terminus. The purified protein was biotinylated in vitro.

**Description** Poliovirus receptor-related 1 (herpesvirus entry mediator C; nectin-1;

CD111), also known as PVRL1 is a cell adhesion molecule belonging to the immunoglobulin superfamily that can bind to virion glycoprotein D (gD) to mediate entry of herpes simplex viruses (HSV) and pseudorabies virus (PRV). CD111/Nectin-1/PVRL1 colocalizes with E-cadherin at adherens junctions in epithelial cells. The disruption of cell junctions can result in the redistribution of nectin-1. To determine whether disruption of junctions by calcium depletion influenced the susceptibility of epithelial cells to viral entry, Madin-Darby canine kidney cells expressing endogenous nectin-1 or transfected human nectin-1 were tested for the ability to bind soluble forms of viral gD and to be infected by HSV and PRV, before and after calcium depletion. It has been revealed that binding of HSV and PRV gD was localized to adherens junctions in cells maintained in normal medium but was distributed, along with nectin-1, over the entire cell surface after calcium depletion. Both the binding of gD and the fraction of cells that could be infected by HSV-1 and PRV were enhanced by calcium depletion. Taken together, CD111/Nectin-1/PVRL1 confined to adherens junctions in epithelial cells is not very accessible to virus, whereas dissociation of cell

junctions releases nectin-1 to serve more efficiently as an entry recptor.

Expression System HEK293

Species Human

Tag C-hFc

Predicted N Terminal Gln 31

**Form** Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and

0.01% Tween80.

Molecular Mass The recombinant human PVRL1/Fc is a disulfide-linked homodimeric

protein. The reduced monomer consists of 545 amino acids and predictes a molecular mass of 61 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhPVRL1/Fc monomer is approximately 75-85

kDa due to glycosylation.

Protein length Met1-Thr334



**Endotoxin** 

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

Purity

> 95 % as determined by SDS-PAGE

Storage

Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

SDS-PAGE

