

Recombinant Rat CD111 / Nectin-1 / PVRL1 Protein (Fc tag)

Cat.NO.: TP07152

3th Edition

Synonyms:PVRL1

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 receptor.

Form:PBS

Molecular Weight:63.3 kDa

Sequences:Met1-Ala354

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.