

PVRL1/NECTIN1 Active Protein | NECTIN1 active protein

PVRL1/NECTIN1 Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257983

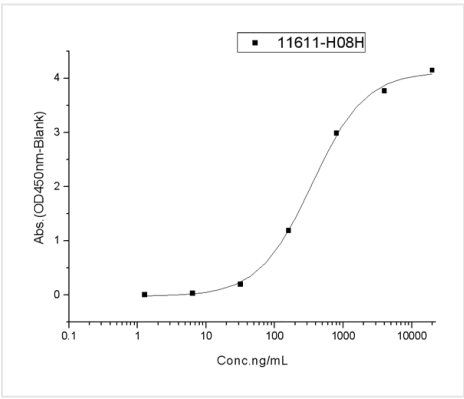
HOST
HEK293 Cells

PRODUCT SYNONYMS

PVRL1/NECTIN1; PVRL1/NECTIN1 Protein; Human; Recombinant (His Tag); Human CD111/Nectin-1/PVRL1 Protein (His Tag); CD111 Protein; CLPED1 Protein; ED4 Protein; HlgR Protein; HV1S Protein; HVEC Protein; nectin-1 Protein; OFC7 Protein; PRR Protein; PRR1 Protein; PVRR Protein; PVRR1 Protein; SK-12 Protein; poliovirus receptor-related 1 (herpesvirus entry mediator C); NECTIN1 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>98% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Thr33 4
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Gln 31
Tag	C-His
Protein Construction	A DNA sequence encoding the human PVRL1 isoform 1 (NP_002846.3) extracellular domain (Met 1-Thr 334) was expressed, with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	1. Measured by its binding ability in a functional ELISA. Immobilized PVRL3 at 1ug/ml (100uL/well) can bind biotinylated recombinant human PVRL1/Nectin-1 with a linear range of 6.4-800ng/mL. 2. Immobilized Nectin 3 Protein, Human, Recombinant (ECD, hFc Tag) at 2ug/ml (100uL/well) can bind PVRL1/NECTIN1 Protein, Human, Recombinant (His Tag). The EC50 of PVRL1/NECTIN1 Protein, Human, Recombinant (His Tag) is 150-700ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Immobilized Nectin 3 Protein, Human, Recombinant (ECD, hFc Tag) at 2 ug/ml (100 ul/well) can bind PVRL1/NECTIN1 Protein, Human, Recombinant (His Tag), the EC50 of PVRL1/NECTIN1 Protein, Human, Recombinant (His Tag) is 150-700 ng/mL.

ADDITIONAL INFORMATION

Related Product Information for NECTIN1 active protein	Background: 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.
References	Yoon M, et al. (2002) Disruption of adherens junctions liberates nectin-1 to serve as receptor for herpes simplex virus and pseudorabies virus entry. J Virol. 76(14): 7203-8.Mata M, et al. (2001) HveC (nectin-1) is expressed at high levels in sensory neurons, but not in motor neurons, of the rat peripheral nervous system. J Neurovirol. 7(5): 476-80.Haarr L, et al. (2001) Transcription from the gene encoding the herpesvirus entry receptor nectin-1 (HveC) in nervous tissue of adult mouse. Virology. 287(2): 301-9.

NCBI AND UNIPROT INFORMATION

NCBI GI #	42560237
NCBI GeneID	5818
NCBI Accession #	NP_002846.3
NCBI GenBank Nucleotide #	NM_002855.4
UniProt Accession #	Q15223; O75465; Q2M3D3; Q9HBE6; Q9HBW2
Molecular Weight	57,158 Da
NCBI Official Full Name	poliovirus receptor-related protein 1 isoform 1
NCBI Official Synonym Full Names	poliovirus receptor-related 1 (herpesvirus entry mediator C)
NCBI Official Symbol	PVRL1
NCBI Official Synonym Symbols	ED4; PRR; HlgR; HVEC; OFC7; PRR1; PVRR; CD111; PVRR1; SK-12; CLPED1; nectin-1

NCBI Protein Information	poliovirus receptor-related protein 1; nectin 1; poliovirus receptor-like 1; herpesvirus Ig-like receptor; herpes virus entry mediator C; ectodermal dysplasia 4 (Margarita Island type)
UniProt Protein Name	Poliovirus receptor-related protein 1
UniProt Gene Name	PVRL1
UniProt Synonym Gene Names	HVEC; PRR1; Herpesvirus entry mediator C; HveC; HlgR
UniProt Entry Name	PVRL1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/hek293-cells-active-protein/pvrl1-nectin1/257983>