



Recombinant Protein Technical Manual

Recombinant Human CD111/Nectin Protein (His Tag)

RPES2271

Product Data:

Product SKU: RPES2271

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q15223

Protein Information:

Molecular Mass: 35.0 kDa

AP Molecular Mass: 28 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Poliovirus Receptor-Related Protein 1; Herpes Virus Entry Mediator C; Herpesvirus Entry Mediator C; HveC; Herpesvirus Ig-Like Receptor; HlgR; Nectin; CD111; PVRL1; HVEC; PRR1;ED4;HlgR;HV1S;HVEC;nectin;OFC7;PRR;PVRR;PVRR1;SK2

Immunogen Information:

Sequence: Gln31-Thr334

Background:

Nectin is a type I transmembrane glycoprotein belonging to the Ig superfamily. Nectin promotes cell-cell contacts by forming homophilic or heterophilic trans-dimers. Heterophilic interactions have been detected between Nectin and Nectin-3 and between Nectin and Nectin-4. Nectin ECDs contain three Ig like domains: an N terminal V type that mediates ligand binding, and two C2 type. Nectin binds viral Glycoprotein D to mediate Herpesvirus (but not Poxvirus) entry into vaginal mucosa, sensory neurons and fibroblasts. In forming adherens junctions and synapses, Nectin and Nectin-3 initiate cell-cell interactions, recruiting $\alpha\beta3$ integrin extracellularly and cadherins intracellularly through afadin and other junctional proteins. These interactions organize the cytoskeleton, strengthen attachment to basement membrane and promote further cell-cell connections. Nectin and Nectin-3 have been found to localize assymmetrically along the chemical synapse, with Nectin primarily on the axonal side and Nectin-3 on the dendritic side. Deficiency of Nectin can result in cleft lip/palate ectodermal dysplasia. Nectin downregulation in epithelial cancers is mediated in part by ectodomain shedding, but it may contribute to invasiveness.