Data Sheet (Cat.No.TMPY-06295)

TargetMol

Nectin-2 Protein, Human, Recombinant (hFc & Avi), Biotinylated

General Information

Synonyms:	Nectin-2;HVEB;PVRR2;CD112;PRR2;poliovirus receptor-related 2 (herpesvirus entry mediator B)
Protein Construction:	A DNA sequence encoding the human NECTIN2 (NP_002847.1)(Met1-Leu360) was expressed with a c-terminal AVI tagged Fc region of human IgG1 at the C-terminus (Fc-AVI). The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed. Predicted N terminal: Gln 32
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q92692-2
Molecular Weight:	64.08 kDa (predicted); 75.99 kDa (reducing conditions)

QC Testing

Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized Human PVRIG hFc at 2 μg/mL (100 μL/well) can bind Human Nectin-2 (ECD, hFc & AVI Tag), Biotinylated, the EC50 of Human Nectin-2 (ECD, hFc & AVI Tag), Biotinylated is 10-60 ng/mL.
Purity:	≥ 95 % as determined by SDS-PAGE. ≥ 95 % as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Cluster of Differentiation 112 (CD112), also known as poliovirus receptor related protein 2 (PVRL2 or PRR2), is a

single-pass type I transmembrane glycoprotein belonging to the Immunoglobulin superfamily. CD112 protein also serves as an entry for certain mutant strains of herpes simplex virus and pseudorabies virus, and thus is involved in cell to cell spreading of these viruses. CD112 protein has been identified as the ligand for DNAM-1 (CD226), and the interaction of CD226/CD112 protein can induce NK cell- and CD8+T cell-mediated cytotoxicity and cytokine secretion. CD112 has been regarded as a critical component in allergic reactions, and accordingly may function as a novel target for anti-allergic therapy.

Reference

Bachelet I, et al. (2006) Mast cell costimulation by CD226/CD112 (DNAM-1/Nectin-2): a novel interface in the allergic process. J Biol Chem. 281(37): 27190-6.

Wang L, et al. (2009) Molecular cloning, characterization and three-dimensional modeling of porcine nectin-2/CD112. Vet Immunol Immunopathol. 132(2-4): 257-63.

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