Data Sheet (Cat.No.TMPY-03036)

TargetMol

Nectin-2 Protein, Rat, Recombinant (His)

General Information

Synonyms:	poliovirus receptor-related 2 (herpesvirus entry mediator B)
Protein Construction:	A DNA sequence encoding the rat PVRL2 (Q9ESS6) (Met1-Gly351) was expressed, fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Gln 32
Species:	Rat
Expression Host:	HEK293 Cells
Accession:	Q9ESS6
Molecular Weight:	36 kDa (predicted); 46 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
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.

Shipping:

In general, Lyophilized powders are shipping with blue 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.