

Biotinylated Recombinant Mouse CD112-Fc Chimera (carrier-free)

Catalog# / Size	779302 / 10 µg 779304 / 25 µg 779306 / 100 µg
Regulatory Status	RUO
Other Names	Poliovirus receptor-like 2, PVRL2, Herpesvirus entry mediator B, HVEB, Poliovirus receptor-related 2, PRR2, CD112 antigen, Nectin2, Nectin-2, CD112
Description	CD112/Nectin-2, also known as poliovirus receptor related protein 2 (PVRL2), is a Ca ²⁺ independent immunoglobulin-like cell adhesion molecule that belongs to the Nectin family. Nectins were originally identified as virus receptors and the family consists of four members, nectin-1, nectin-2, nectin-3 and nectin-4. Nectin-1, nectin-2, and nectin-3 were named PVRL1, PVRL2, and PVRL3 and assigned as CD111, CD112, and CD113, respectively. Nectins mediate both homophilic and heterophilic interactions. They first form cis-homodimers followed by dimer formation in trans. The trans-interaction can be either homophilic or heterophilic. CD112/Nectin-2 also binds to DNAM-1/CD226 on NK cells. The interaction between CD112 and CD226 can induce NK cell and CD8 ⁺ T cell-mediated cytotoxicity and cytokine secretion. CD112/Nectin-2 also serves as an entry for certain mutant strains of herpes simplex virus and pseudorabies virus. CD112/Nectin-2 localizes to adherens junctions between neurons, endothelial cells, epithelial cells, and fibroblasts.

Product Details

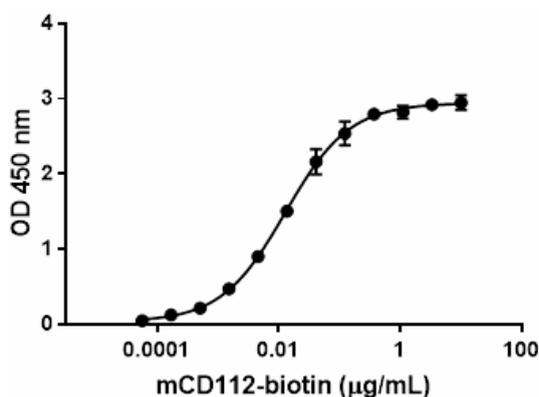
Source	Mouse CD112, amino acids Gln32-Gly351 (Accession # NM_008990.3) with a C-terminal human IgG1 Fc tag was expressed in 293E cells.
Molecular Mass	The 559 amino acid recombinant protein has a predicted molecular mass of approximately 61.5 kD. The DTT-reduced protein migrates at approximately 65 kD and non-reduced protein migrates at approximately 130 kD by SDS-PAGE. The predicted N-terminal amino acid is Gln.
Purity	>95%, as determined by Coomassie stained SDS-PAGE.
Formulation	0.22 µm filtered protein solution is in PBS, pH 7.2, 5% Glycerol
Endotoxin Level	Less than 0.1 EU per µg protein as determined by the LAL method.
Concentration	10 and 25 µg sizes are bottled at 200 µg/mL. 100 µg and larger sizes are lot-specific and bottled at the concentration indicated on the vial. To obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.
Storage & Handling	Unopened vial can be stored between 2°C and 8°C for one month, at -20°C for six months, or at -70°C for one year. For maximum results, quick spin vial prior to opening. The protein can be aliquoted and stored at -20°C to -70°C. Stock solutions can also be prepared at 50 - 100 µg/mL in sterile buffer (PBS, HPBS, DPBS, or EBSS) containing carrier protein such as 0.2-1% BSA or HSA and stored in working aliquots at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
Activity	When mouse CD112R (Cat. No. 776602) is immobilized at 1.0 µg/mL, biotinylated mouse CD112 binds with an EC ₅₀ of 15 - 60 ng/mL. HRP Avidin (Cat. No. 405103) was used to detect the binding.
Application	Bioassay
Application Notes	BioLegend carrier-free recombinant proteins provided in liquid format are shipped on blue ice. Our comparison testing data indicates that when handled and stored as recommended, the liquid format has equal or better stability and shelf-life compared to commercially available lyophilized proteins after reconstitution. Our liquid proteins are verified in-house to maintain activity after shipping on blue ice and are backed by our 100% satisfaction guarantee . If you have any concerns, contact us at tech@biolegend.com .

Antigen Details

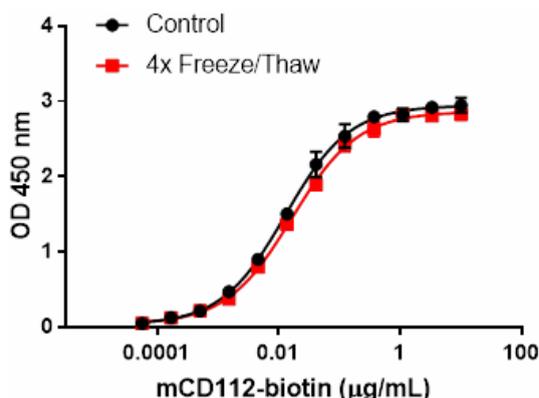
Structure	Disulfide-linked homodimer, biotinylated via amines
Distribution	Localizes to adherens junctions between neurons, endothelial cells, epithelial cells, and fibroblasts
Function	Modulator of T-cell signaling. Can be either a costimulator or a coinhibitor of T-cell function. Upon binding to CD226, it stimulates T-cell proliferation and cytokine production. Upon interaction with PVRIG, it inhibits T-cell proliferation.
Interaction	Neurons, endothelial cells, epithelial cells, fibroblasts
Ligand/Receptor	CD112R
Bioactivity	Measured by its ability to bind mouse CD112R
Cell Type	Endothelial cells, Epithelial cells, Fibroblasts, Neurons, NK cells, T cells
Biology Area	Angiogenesis, Cancer Biomarkers, Cell Adhesion, Cell Biology, Cell Motility/Cytoskeleton/Structure, Immunology, Innate Immunity, Stem Cells
Molecular Family	CD Molecules, Immune Checkpoint Receptors, Soluble Receptors
Antigen References	<ol style="list-style-type: none"> 1. Morrison ME, <i>et al.</i> 1992. <i>J Virol.</i> 66:2807-2813. 2. Warner MS, <i>et al.</i> 1998. <i>Virology.</i> 246:179-189. 3. Bottino C, <i>et al.</i> 2003. <i>J Exp Med.</i> 198:557-567. 4. Liu J, <i>et al.</i> 2012. <i>J Immun.</i> 188:5511-5520. 5. Zhu Y, <i>et al.</i> 2016. <i>J Exp Med.</i> 213:167-176.

Gene ID [19294](#)

Product Data



When mouse CD112R (Cat. No. 776602) is immobilized at 1.0 µg/mL, Mouse CD112-Fc Chimera Biotinylated Protein binds with EC₅₀ of 15 - 60 ng/mL. HRP Avidin (Cat. No. 405103) was used to detect the binding.



Stability testing for Mouse N-Cadherin. Mouse CD112-Fc Chimera Biotinylated Protein was aliquoted in PBS, pH 7.2, 5% Glycerol at 0.2 mg/mL. One aliquot was frozen and thawed four times (4x Freeze/Thaw), and compared to a control kept at 4°C (Control). The samples were tested for their ability to bind immobilized mouse CD112R (Cat. No. 776602).

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