

CD112R (PVRIG), Fc-Fusion, Avi-Tag, Biotin-Labeled (Human) HiP™ Recombinant

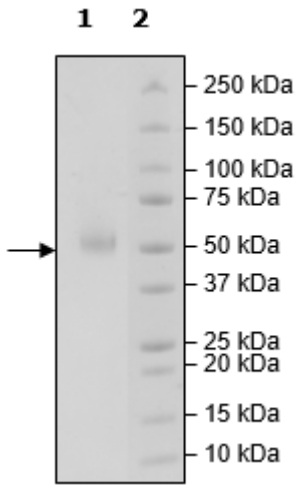
Catalog: 79270
Lot: 170824

Product Information

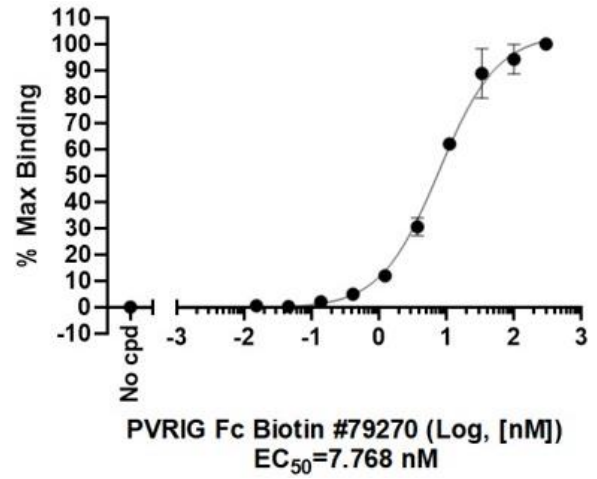
Description:	Recombinant human CD112R, also known as PVRIG (Poliovirus receptor-related Immunoglobulin domain-containing protein), encompassing amino acids 41-172. This construct contains a C-terminal Human IgG1, Fc region followed by an Avi-Tag™. The recombinant protein was affinity purified. HiP™ indicates a high purity protein with ≥90% purity as measured by gel filtration.
Background:	CD112R (Poliovirus receptor-related immunoglobulin domain containing, PVRIG) is the receptor for CD112 (Poliovirus receptor-related 2, PVRL2) found on antigen-presenting cells and tumor cells. CD112R is present in NK and T cells, particularly CD8+ T cells. Elevated levels of this receptor are observed in NK, CD8+, and CD4+ T cells in patients with cancer of the kidney, ovary, lung, prostate, and endometrium, and in acute myeloid leukemia (AML). CD112-CD112R complex acts as a positive immune checkpoint, boosting human T cell response and serving as a promising therapeutic target in oncology. TIGIT (T cell immunoreceptor with Ig and ITIM domains) and CD226 (also known as DNAM-1, DNAX Accessory Molecule-1) also bind CD112. Developing inhibitors to hinder CD112R-CD112 interaction alone or combined with blocking TIGIT-CD155/CD112 interaction holds promise for cancer therapy.
Species:	Human
Construct:	CD112R (41-172-Fc-Avi)-(Biotin)
Concentration:	0.53 mg/ml
Expression System:	HEK293
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	8 mM Phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	42 kDa
Aggregation:	<10%
Genbank Accession:	NM_024070
Label:	This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation confirmed to be ≥90%.
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	The antibody was validated by measuring anti-PVRIG binding to PVRIG antigen in an ELISA assay. The anti-PVRIG protein (BPS Bioscience #101712) was coated onto a 96-well plate overnight at 4°C (50 µl/well at a concentration of 2 µg/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (BPS Bioscience #79311) and blocked using 100 µl of Blocking Buffer 2 (BPS Bioscience #79728) for 1 hour at room temperature. After removing the blocking buffer, 50 µl/well of serially diluted CD112R (PVRIG) Fc-Fusion, Avi-Tag, Biotin-Labeled (Human) (BPS Bioscience #79270), in Blocking Buffer 2 was added for 1 hour at room temperature. After 3 more washes, the plate was incubated with Streptavidin-HRP (BPS Bioscience #79742), washed, and incubated with the Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at 450 nm. The Blank value was subtracted from all values.
Applications:	Useful for binding of PVRIG in ELISA and in cellular assays.

Quality Control Data

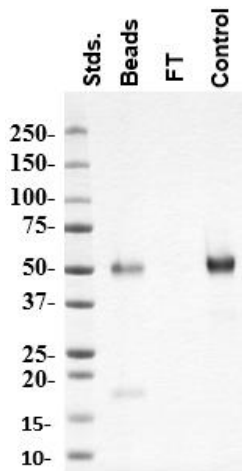
4-20% SDS-PAGE Coomassie Staining



Anti-PVRIG:PVRIG Biotin Binding Assay



Biotin-Avidin Pulldown



CD112R (PVRIG), Fc-Fusion, Avi-Tag, Biotin-Labeled (Human) HiP™ Recombinant

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Quality Control Data

Gel Filtration Curve

