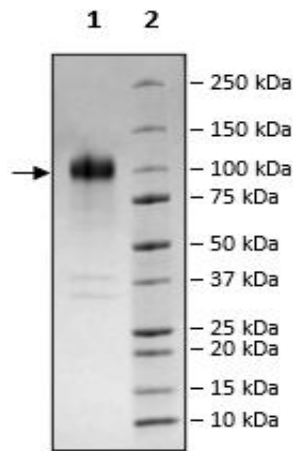


Product Information

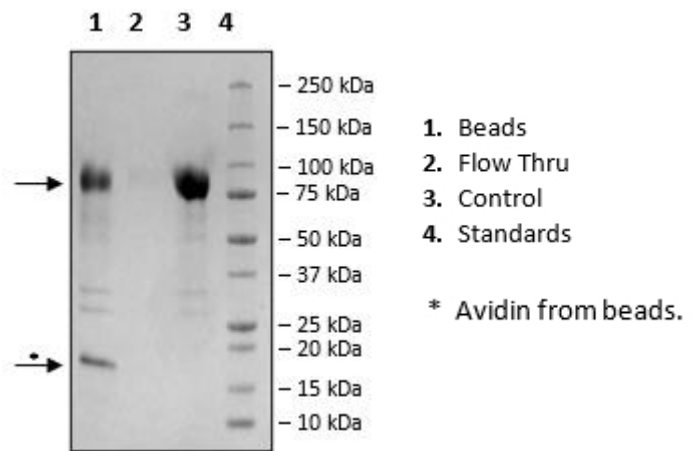
Description:	Recombinant human CD200R1 (cluster of differentiation 200 receptor 1), encompassing extracellular amino acids 29-265. This construct contains a C-terminal Fc domain from human IgG1 followed by an Avi-Tag™. This protein was affinity purified.
Background:	CD200R1 (cluster of differentiation 200 receptor 1), also known as OX-2R, is a transmembrane glycoprotein. It is found in cells of the myeloid and lymphoid lineage, such as CD4 ⁺ cells. It acts as immune inhibitory receptor, but contrary to other proteins with the same function, it does exhibit an ITIM (tyrosine-based inhibitory motif) domain. When bound to CD200 it contributes to the formation of an immunosuppressive TEM (tumor microenvironment), via a Dok1 (docking protein 1), Dok2 and RasGAP dependent mechanism, leading to T cell responses inhibition, NK cell cytotoxicity decrease, potentiation of Treg cell expansion and decrease of other immune responses to cancer cells. In addition to cancer, CD200 is linked to auto-immune disorders, inflammation, infection, graft survival and cancer. Samalizumab, an anti-CD200 monoclonal antibody, has resulted in positive outcomes when used in patients suffering from CLL (chronic lymphocytic leukemia) and MM (multiple myeloma). Inhibition of the interaction between CD200 and CD200R1 may thus be beneficial as a new therapy approach in CD200-related diseases.
Species:	Human
Construct:	CD200R1 (29-265-Fc(IgG1)-Avi)-(Biotin)
Concentration:	1.39 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:	55 kDa + glycans
Glycosylation:	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
Genbank Accession:	NM_138806.4
Label:	This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation is 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 protein was validated by measuring CD200R1 binding to CD200 in ELISA assay. The CD200 protein (BPS Bioscience #102030) was coated onto a 96-well plate overnight at 4°C (50 µl/well at a concentration of 4 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 purified CD200R1, Fc Fusion, Avi-Tag, Biotin-Labeled Recombinant (BPS Bioscience #102033), serially diluted 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 studying the binding and neutralizing of CD200R1 in ELISA and cellular assays.

Quality Control Data

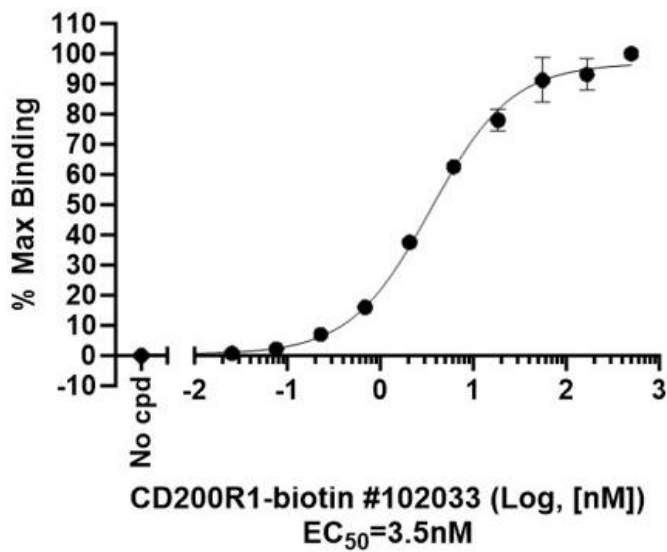
4-20% SDS-PAGE Coomassie Staining



Biotin-Avidin Pulldown



CD200:CD200R1-Biotin Binding Assay



CD200:CD200R1-Biotin Neutralizing Assay

