

Product Information

Description:	Recombinant human CD200 (cluster of differentiation 200), encompassing amino acids 31-232. This construct contains an Fc domain of IgG1 fused to the C-terminus, followed by a C-terminal Avi-Tag™. This protein was affinity purified.
Background:	CD200 (cluster of differentiation 200), also known as OX-2, is type 1 membrane glycoprotein of the immunoglobulin supergene family. It is structurally related to the B7 family of costimulatory receptors. It is found in cells of the myeloid and lymphoid lineage, such as activated T and B cells, neurons, endothelial cells, and cancer cells. Its expression depends on IFN- γ (interferon gamma) and TNF- α (tumor necrosis factor alpha), and it is regulated by C/EBP- β . When bound to CD200R (CD200 receptor) it contributes to the formation of an immunosuppressive TME (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. CD200 can be found in a soluble form at high levels in the serum of cancer patients, linking to a poor prognosis. A splice variant missing exon 2, CD200tr, can also be formed, which may act as a competitive inhibitor for full length CD200. In addition to cancer, CD200 is linked to auto-immune disorders, inflammation, infection, and graft survival. 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).
Species:	Human
Construct:	CD200 (31-232-Fc(IgG1)-Avi)
Concentration:	1.64 mg/ml
Expression System:	HEK293
Purity:	$\geq 90\%$
Format:	Aqueous buffer solution.
Formulated In:	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	51 kDa + glycans
Glycosylation:	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
Genbank Accession:	NM_005944.7
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.
Applications:	Useful for SDS-PAGE.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining

