

Recombinant Human CD200R1 protein (hFc Tag, Myc Tag, His Tag)

Catalog Number: Eg0032

Basic Information

Species:
Human

EC50:
3-10 ng/mL

Purity:
>95 %, SDS-PAGE

Tag:
hFc Tag, Myc Tag, His Tag

Technical Specifications

Purity:
>95 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ µg protein, LAL method

Source:
HEK293-derived Human CD200R1 protein Ala27-Leu266 (Accession# NP_620161.1) with a human IgG1 Fc tag, a Myc tag, a His tag at the C-terminus.

GeneID:
131450

Accession:
NP_620161.1

Predicted Molecular Mass:
55.3 kDa

SDS-PAGE:
70-100 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human CD200 (Myc tag, His tag) at 2 µg/mL (100 µL/well) can bind Human CD200R1 (hFc tag, Myc tag, His tag) with a linear range of 3-10 ng/mL.

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

CD200R1 encodes a receptor for the OX-2 membrane glycoprotein, an Ig superfamily transmembrane glycoprotein expressed on the surface of myeloid cells; it can also be induced in certain T-cell subsets. CD200R1 interacts with CD200, which is also an Ig superfamily transmembrane glycoprotein, to down regulate myeloid cell functions. Mouse studies of a related gene suggest that this interaction may control myeloid function in a tissue-specific manner. CD200 is expressed on the surface of a variety of cells including neurons, epithelial cells, endothelial cells, fibroblasts, lymphoid cells, and astrocytes. The regulation of CD200R1 signaling can occur by posttranslational modification—namely, phosphorylation of tyrosines in the CD200R1 cytoplasmic tail—or by the inducible expression or downregulation of either CD200R1 or CD200.

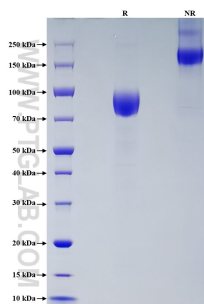
References

1. Timmerman LM, et al. (2021) PLoS One. 29;16(3):e0244770.
2. Lin S, et al. (2020) Eur J Neurol. 27(7):1224-1230.
3. Blom LH, et al. (2017) Allergy. 72(7):1081-1090.
4. Fraser SD, et al. (2016) Sci Rep. 8;6:38689.
5. Sun H, et al. (2016) Immunol Lett. 178:105-13.
6. Caserta S, et al. (2012) PLoS One. 7(4):e35466.
7. Wright GJ, et al. (2000) 13(2):233-42.

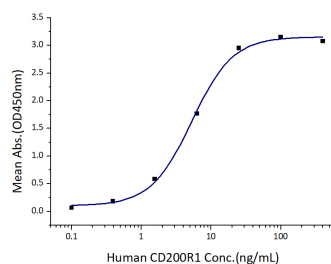
Synonyms

CD200R, CD200R1, CD200 receptor 1, CRTR2, HCRT2

Selected Validation Data



Purity of Recombinant Human CD200R1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



Immobilized Human CD200 (Myc tag, His tag) at 2 μ g/mL (100 μ L/well) can bind Human CD200R1 (hFc tag, Myc tag, His tag) with a linear range of 3-10 ng/mL.