

## Recombinant Human CD200 Protein( Fc Tag)

**Catalog Number: GPMH0226**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

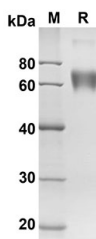
### Description

|                      |                                                                           |
|----------------------|---------------------------------------------------------------------------|
| <b>Species</b>       | Human                                                                     |
| <b>Source</b>        | Mammalian-derived Human CD200 protein Gln31-Gly232, with an C-terminal Fc |
| <b>Calculated MW</b> | 47.1 kDa                                                                  |
| <b>Observed MW</b>   | 60-70 kDa                                                                 |
| <b>Accession</b>     | P41217                                                                    |
| <b>Bio-activity</b>  | Not validated for activity                                                |

### Properties

|                       |                                                                                                                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 90% as determined by reducing SDS-PAGE.                                                                                                                                                                                              |
| <b>Endotoxin</b>      | < 1.0 EU/mg of the protein as determined by the LAL method                                                                                                                                                                             |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                        |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.                                                                                                                                                  |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.                                                                                               |

### Data



SDS-PAGE analysis of Human CD200 proteins, 2 µg/lane of  
Recombinant Human CD200 proteins was resolved with  
SDS-PAGE under reducing conditions, showing bands at  
47.1 KD

### Background

CD200 (OX-2) is a cell surface glycoprotein that imparts immune privileges by suppressing alloimmune and autoimmune responses through its receptor, CD200R, expressed primarily on myeloid cells. Signals delivered through the CD200-CD200R axis have been shown to play an important role in the regulation of anti-tumor immunity, and overexpression of CD200 has been reported in a number of malignancies, including CLL, as well as on cancer stem cells. The role of CD200-CD200R signaling in immune regulation of the central nervous system has become a popular field of research in recent years. Many studies have shown that there is a close correlation between CD200-CD200R, microglia activation, and Parkinson's disease (PD). The ability of CD200 to suppress myeloid cell activation is critical for maintaining normal tissue homeostasis but may also enhance the survival of migratory neoplastic cells. CD200 and CD200R associate via their respective N-terminal Ig-like domains. CD200 has been characterized as an important immunoregulatory molecule, increased expression of which can lead to decreased transplant rejection, autoimmunity, and allergic disease. Elevated CD200 expression has been reported to be associated with poor prognosis in some human malignancies. Besides, CD200 also plays an important role in prevention of graft rejection, autoimmune diseases and spontaneous abortion.