

# Active Recombinant Cynomolgus Monkey CD200 protein, Fc-tagged

**Cat. No.** CD200-243C    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

Recombinant Cynomolgus Monkey CD200 (Gln56-Gly257) fused with Fc region of Human IgG1 at C-terminal was expressed in CHO.

### Species

Cynomolgus

### Source

CHO

### ProteinLength

56-257 a.a.

### Description

CD200, also known as OX-2, is a 45 kDa transmembrane immunoregulatory protein that belongs to the immunoglobulin superfamily. Mature cynomolgus CD200 consists of a 202 aa extracellular domain (ECD) with one Ig-like V-type domain and one Ig-like C2-type domain, a 27 aa transmembrane segment, and a 19 aa cytoplasmic domain. Within the ECD, cynomolgus CD200 shares 95%, 78%, and 78% aa sequence identity with human, mouse, and rat CD200, respectively. CD200 is widely but not ubiquitously expressed. Its receptor (CD200 R1) is restricted primarily to mast cells, basophils, macrophages, and dendritic cells, which suggests myeloid cell regulation as the major function of CD200. CD200 knockout mice are characterized by increased macrophage number and activation and are predisposed to autoimmune disorders. CD200 and CD200 R associate via their respective N-terminal Ig-like domains. In myeloid cells, CD200 R initiates inhibitory signals following receptor-ligand contact. In T cells, however, CD200 functions as a costimulatory molecule independent of the CD28 pathway. Several additional CD200 R-like molecules have

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been identified in human and mouse, but their capacity to interact with CD200 is controversial. Several viruses encode CD200 homologs which are expressed on infected cells during the lytic phase. Like CD200 itself, viral CD200 homologs also suppress myeloid cell activity, enabling increased viral propagation.

**Predicted N Terminal**

No results obtained. Gln56 inferred from enzymatic pyroglutamate treatment revealing Val57

**Form**

Lyophilized from a 0.2 µm filtered solution in PBS.

**Bio-activity**

Measured by its binding ability in a functional ELISA. When Recombinant Human CD200 R1 Fc Chimera is immobilized at 0.5 µg/mL (100 µL/well), the concentration of Recombinant Cynomolgus Monkey CD200 Fc Chimera that produces 50% of the optimal binding response is 5-35 ng/mL.

**Molecular Mass**

Predicted Molecular Mass: 49 kDa  
SDS-PAGE: 64-73 kDa, reducing conditions

**Endotoxin**

<0.1 EU per 1 µg of the protein by the LAL method.

**Purity**

>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Storage**

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
12 months from date of receipt, -20 to -70 centigrade as supplied.  
1 month, 2 to 8 centigrade under sterile conditions after reconstitution.  
3 months, -20 to -70 centigrade under sterile conditions after reconstitution.

**Reconstitution**

Reconstitute at 1 mg/mL in PBS.

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## GENE INFORMATION

**Gene Name** CD200 CD200 molecule [ *Macaca fascicularis* ]

**Official Symbol** CD200

**Synonyms** CD200; CD200 molecule

**Gene ID** 102146004

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