

# Mouse CD200 Protein (His Tag)

Catalog Number: 50074-M08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

Mox2; OX2

### Protein Construction:

A DNA sequence encoding the extracellular domain of mouse CD200 (O54901.1) (Met 1-Gly 232) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Bio Activity:

**Measured by its binding ability in a functional ELISA**  
**. Immobilized recombinant mouse CD200 at 1 µg/ml (100ul/well) can bind mouse CD200R1/Fc with a linear range of 1.5-200 ng/ml**

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Gln 31

### Molecular Mass:

The secreted recombinant mouse CD200 consists of 213 amino acids and has a calculated molecular mass of 24 kDa.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

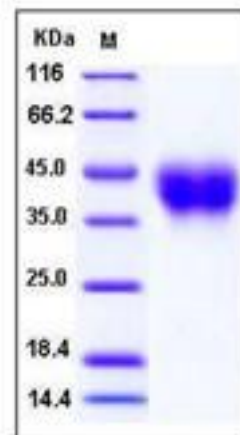
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

CD2 (OX-2) is a cell surface glycoprotein that imparts immune privileges by suppressing alloimmune and autoimmune responses through its receptor, CD2R, expressed primarily on myeloid cells. Signals delivered through the CD2:CD2R axis have been shown to play an important role in the regulation of anti-tumor immunity, and overexpression of CD2 has been reported in a number of malignancies, including CLL, as well as on cancer stem cells. The role of CD2-CD2R 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 CD2-CD2R, microglia activation, and Parkinson's disease (PD). The ability of CD2 to suppress myeloid cell activation is critical for maintaining normal tissue homeostasis but may also enhance the survival of migratory neoplastic cells. CD2 and CD2R associate via their respective N-terminal Ig-like domains. CD2 has been characterized as an important immunoregulatory molecule, increased expression of which can lead to decreased transplant rejection, autoimmunity, and allergic disease. Elevated CD2 expression has been reported to be associated with poor prognosis in a number of human malignancies. In addition, CD2 also plays an important role in prevention of graft rejection, autoimmune diseases and spontaneous abortion.

## References

- 1.Minas K, et al. (2006) Is the CD200/CD200 receptor interaction more than just a myeloid cell inhibitory signal? Crit Rev Immunol. 26(3): 213-30.
- 2.Wang XJ, et al. (2007) CD200-CD200R regulation of microglia activation in the pathogenesis of Parkinson's disease. J Neuroimmune Pharmacol. 2(3): 259-64.
- 3.Wong KK, et al. (2010) The role of CD200 in immunity to B cell lymphoma. J Leukoc Biol. 88(2): 361-72.

**Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.**

**For US Customer: Fax: 267-657-0217**

● **Tel: 215-583-7898**

**Global Customer: Fax :+86-10-5862-8288**

● **Tel:+86-400-890-9989**

● <http://www.sinobiological.com>