

**DESCRIPTION**

<b>Source</b>	Mouse myeloma cell line, NS0-derived mouse CD200R1L protein		
	Mouse CD200R1L (Ile25-Thr220) Accession # Q6XJV6.1	IEGRMDP	Mouse IgG <sub>2a</sub> (Glu98-Lys330)
	N-terminus		C-terminus
<b>N-terminal Sequence</b>	Ile25		
<b>Analysis</b>			
<b>Structure / Form</b>	Disulfide-linked homodimer		
<b>Predicted Molecular Mass</b>	48 kDa		

**SPECIFICATIONS**

<b>SDS-PAGE</b>	65-85 kDa, under reducing conditions
<b>Activity</b>	Measured by its binding ability in a functional ELISA. When Recombinant Mouse CD200 Fc Chimera (Catalog # 3355-CD) is immobilized at 2 µg/mL (100 µL/well), Recombinant Mouse CD200R1L Fc Chimera (Catalog # 10198-CD) binds with an ED <sub>50</sub> of 0.35-2.8 µg/mL.
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Shipping</b>	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>• 6 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after opening.</li> <li>• 3 months, -20 to -70 °C under sterile conditions after opening.</li> </ul>

**DATA**

**Binding Activity**

**Recombinant Mouse CD200R1L Fc Chimera Protein Binding Activity** When Recombinant Mouse CD200 Fc Chimera (Catalog # 3355-CD) is immobilized at 2 µg/mL (100 µL/well), Recombinant Mouse CD200R1L Fc Chimera (Catalog # 10198-CD) binds with an ED<sub>50</sub> of 0.35-2.8 µg/mL.

**SDS-PAGE**

**Recombinant Mouse CD200R1L Fc Chimera Protein SDS-PAGE** 2 µg/lane of Recombinant Mouse CD200R1L Fc Chimera was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® blue staining, showing bands at 65-85 kDa and 130-170 kDa, respectively.

**BACKGROUND**

CD200 Receptor 2 (CD200R2), or CD200R1L, is a type I transmembrane receptor for the CD200 cell surface glycoprotein. Mature CD200R2 consists of an extracellular domain (ECD) containing an Ig-like V-type domain and an Ig-like C2-type domain, a transmembrane segment and a short cytoplasmic domain. The ECD of mouse CD200R2 shares a 76% and 63% amino acid (aa) identity with the rat and human ECD, respectively. CD200R2 is strongly expressed on resting mast cells but decreased upon activation via FcεR1. It is also observed on monocytes, bone marrow-derived dendritic cells and TH2 cells (1, 2, 4). It has been demonstrated CD200R2 can interact with CD200 (3) and signal through adaptor protein, DAP12, via its lysine residue in the transmembrane region (2). In addition, it has been reported CD200 and CD200R2 interaction alters dendritic cell differentiation and enhances induction of CD4<sup>+</sup>CD25<sup>+</sup>Foxp3<sup>+</sup> regulatory T cells in mouse transplant model (5).

**References:**

1. Wright, G. *et al.* (2003) *J. Immunol.* **171**:3034.
2. Voehringer, D. (2004) *J. Biol. Chem.* **279**(52):54117.
3. Gorczynski, R. *et al.* (2004) *J. Immunol.* **172**:7744.
4. Minas, K. (2006) *Crit Rev Immunol* **26**(3):213.
5. Gorczynski, R. *et al.* (2008) *J. Immunol.* **180**(9):5946.