



Recombinant Protein Technical Manual

**Recombinant Human
CD200R1L/CD200R2/CD200RLa Protein (His Tag)
RPES0637**

Product Data:

Product SKU: RPES0637

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: AAT00538.1

Protein Information:

Molecular Mass: 25.2 kDa

AP Molecular Mass: 45-60 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CD200R2;CD200RLa

Immunogen Information:

Sequence: Met 1-Leu239

Background:

Cell surface glycoprotein CD200 receptor 2, also known as Cell surface glycoprotein CD200 receptor 1-like, Cell surface glycoprotein OX2 receptor 2, CD200 receptor-like 2, CD200R1a, CD200R1L and CD200R2, is a single-pass type I membrane protein which belongs to the CD200R family. CD200R1L / CD200R2. It contains one Ig-like C2-type (immunoglobulin-like) domain and one Ig-like V-type (immunoglobulin-like) domain. CD200 is a transmembrane protein delivering immunoregulatory signals after engagement of CD200R. A family of CD200Rs exist (CD200R1, CD200R2, CD200R3, CD200R4) with different tissue expression and functional activity. In the presence of anti-CD200R2 / CD200R3 monoclonal antibodies (mAbs), bone-marrow cells cultured in the presence of (interleukin [IL]-4+granulocyte-macrophage colony-stimulating factor) differentiate into dendritic cells (DCs), which induce CD4+CD25+ Treg. Interaction between the relatively ubiquitously expressed molecule CD200 and one of its receptors, CD200R1, resulted in direct suppression of alloreactivity, engagement of alternate receptors led instead to altered differentiation of dendritic cells (DCs) from marrow precursors, which could in turn foster development of Foxp3(+) regulatory T cells. Unlike anti-CD200R1, anti-CD200R2 both promotes development of DCs with capacity to induce Treg and directly augments thymocyte production of Treg.