

## Recombinant Protein Technical Manual

# Recombinant Human CD200/OX-2 Protein (His Tag)(Active) RPES0232

#### **Product Data:**

**Product SKU:** RPES0232 **Size:** 50μg

Species: Human Expression host: HEK293 Cells

Uniprot: NP 005935.4

#### **Protein Information:**

Molecular Mass: 24 kDa

AP Molecular Mass: 40-45 kDa

Tag: C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized recombinant

human CD200 at 1 μg/ml (100 μl/well) can bind human CD200R1 / Fc Chimera

with a linear range of 0.126 ng/ml.

**Purity:** > 98 % 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:** Functional ELISA

**Synonyms:** MOX1;MOX2;MRC;OX-2;OX2

## Immunogen Information:

Sequence: Met 1-Gly 232

## **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 a number of human malignancies. In addition, CD200 also plays an important role in prevention of graft rejection, autoimmune diseases and spontaneous abortion.