

CD200 active protein

CD200 Protein, Human, Recombinant (ECD, hFc Tag)

CATALOG #
AAA257946

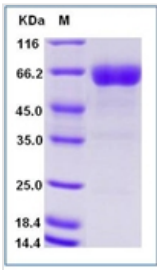
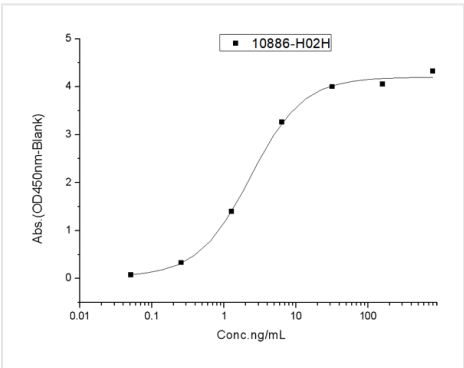
HOST
HEK293 Cells

PRODUCT SYNONYMS

CD200; CD200 Protein; Human; Recombinant (ECD; hFc Tag); Human CD200 Protein (Fc Tag); MOX1 Protein; MOX2 Protein; MRC Protein; OX-2 Protein; OX2 Protein; Cd200 molecule; CD200 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Gly232
Species	Human
Endotoxin	<1.0EU per ug protein as determined by the LAL method.
Predicted N Terminal	Gln 31
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the human CD200 (XP_003825138.1)(Met1-Gly232) was expressed with the Fc region of human IgG1 at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	Measured by its binding ability in a functional ELISA. Immobilized Human CD200R His at 2ug/ml (100uL/well) can bind Human CD200 hFc. The EC50 of Human CD200 hFc is 1.0-7.0ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data

Measured by its binding ability in a functional ELISA. Immobilized Human CD200R His at 2 ug/ml (100 ul/well) can bind Human CD200 hFc, the EC50 of Human CD200 hFc is 1.0-7.0 ng/mL.

ADDITIONAL INFORMATION

Related Product Information for CD200 active protein

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 some human malignancies. Besides, CD200 also plays an important role in prevention of graft rejection, autoimmune diseases and spontaneous abortion.

Product Categories/Family for CD200 active protein

Neuroinflammation Cancer Drug Targets

References

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.

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.

Wong KK, et al. (2010) The role of CD200 in immunity to B cell lymphoma. J Leukoc Biol. 88(2): 361-72.

NCBI AND UNIPROT INFORMATION

Molecular Weight

The recombinant human CD200 consists of 440 amino acids and predicts a molecular mass of 49.2kDa.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.