

Technical Data Sheet

APC conjugated Mouse CD200 (C-His)

Catalog Number: 815903, 815904

Size: 25 ug, 100 ug

Target Name: CD200, MOX1, MOX2, MRC, OX-2, My033

Regulatory Status: RUO

Product Details

Application: FC

Format: Liquid, APC

Expression Host: CHO

Species: Mouse

Sources: Recombinant Mouse CD200 (Gln31-Gly232) with C-terminus His-tag is expressed in CHO cell and conjugated to APC.

Accession Number: O54901

Molecular Weight: The protein has a predicted molecular weight of 24.1 kDa. Under DTT-reducing conditions, it migrates at approximately 45 kDa on SDS-PAGE prior to conjugation.

Affinity Tag: C-His

Formulation: 1xPBS buffer, pH7.4, 0.09% NaN₃ with a carrier protein

Endotoxin level: Not tested

Protein Concentration: 25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

Background Information

CD200 (OX-2) is a cell surface glycoprotein that regulates immune responses through its receptor, CD200R, mainly expressed on myeloid cells. It plays a crucial role in suppressing alloimmune and autoimmune responses, contributing to immune privilege in various tissues. CD200-CD200R signaling is essential in regulating anti-tumor immunity, with overexpression linked to malignancies like chronic lymphocytic leukemia (CLL) and cancer stem cells. Additionally, CD200 signaling is involved in the central nervous system, particularly in diseases like Parkinson's, where it affects microglia activation. Elevated CD200 expression is associated with reduced transplant rejection, autoimmunity, and allergic diseases, but may also promote tumor cell survival. While it helps prevent graft rejection and autoimmune diseases, high CD200 levels in cancers have been linked to poor prognosis. This dual role underscores the complexity of CD200 in immune regulation and its potential as both a therapeutic target and a biomarker.