Human CD200 Fluorescein-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 325516

Catalog Number: FAB27241F

100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD200 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse CD200 is observed.
Source	Monoclonal Mouse IgG_1 Clone # 325516
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD200 Gln31-Gly232 Accession # P41217.3
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

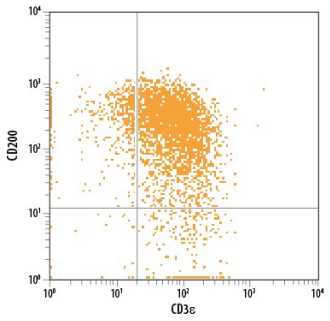
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10^6 cells	See Below

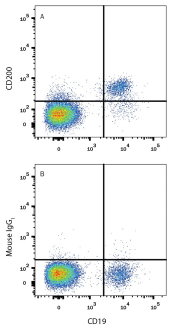
DATA

Flow Cytometry



Detection of CD200 in Th17 Differentiated Human PBMCs by Flow Cytometry. Th17 differentiated human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD200 Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB27241F) and Mouse Anti-Human CD3ε APC-conjugated Monoclonal Antibody (Catalog # FAB100A). Quadrant markers were set based on control antibody staining (Catalog # IC002F). View our protocol for Staining Membrane-associated Proteins.

Flow Cytometry



Detection of CD200 in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD19 APC-conjugated Monoclonal Antibody (Catalog # FAB4867A) and either (A) Mouse Anti-Human CD200 Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB27241F) or (B) Mouse IgG_1 Fluorescein Isotype Control (Catalog # IC002F). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

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Monoclonal Mouse IgG_1 Clone # 325516

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BACKGROUND

CD200, also known as OX-2, is a 45 kDa transmembrane immunoregulatory protein that belongs to the immunoglobulin superfamily (1, 2). The human CD200 cDNA encodes a 278 amino acid (aa) precursor that includes a 30 aa signal sequence, a 202 aa extracellular domain (ECD), a 27 aa transmembrane segment, and a 19 aa cytoplasmic domain. The ECD is composed of one Ig-like V-type domain and one Ig-like C2-type domain (3). A splice variant of CD200 has been described and has a truncated cytoplasmic tail. Within the ECD, human CD200 shares 76% aa sequence identity with mouse and rat CD200. CD200 is widely but not ubiquitously expressed (4). Its receptor (CD200R) is restricted primarily to mast cells, basophils, macrophages, and dendritic cells, which suggests myeloid cell regulation as the major function of CD200 (5–7). CD200 knockout mice are characterized by increased macrophage number and activation and are predisposed to autoimmune disorders (8). CD200 and CD200R associate *via* their respective N-terminal Ig-like domains (9). In myeloid cells, CD200R initiates inhibitory signals following receptor–ligand contact (6, 7, 10). In T cells, however, CD200 functions as a co-stimulatory molecule independent of the CD28 pathway (11). Several additional CD200R-like molecules have been identified in human and mouse, but their capacity to interact with CD200 is controversial (12, 13). Several viruses encode CD200 homologs which are expressed on infected cells during the lytic phase (14, 15). Like CD200 itself, viral CD200 homologs also suppress myeloid cell activity, enabling increased viral propagation (5, 14–16).

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