Human CD38 PerCP-conjugated Antibody



Monoclonal Mouse IgG_{2A} Clone # 240742

Catalog Number: FAB2404C 100 TESTS

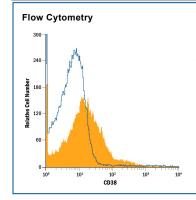
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human CD38 in flow cytometry.		
Source	Monoclonal Mouse IgG _{2A} Clone # 240742		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	NS0 mouse myeloma cell line transfected with human CD38 Met1-Ile300 Accession # P28907		
Conjugate	PerCP (Peridinin-chlorophyll Protein Complex) Excitation Wavelength: 482 and 564 nm Emission Wavelength: 675 nm		
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

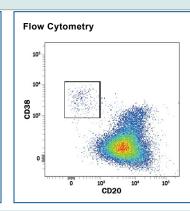
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

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

DATA



Detection of CD38 in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD38 PerCPconjugated Monoclonal Antibody (Catalog # FAB2404C, filled histogram) or isotype control antibody (Catalog # IC003C, open histogram). View our protocol for Staining Membrane-associated Proteins.



Detection of CD38 in Human PBMCs gated on CD19+ CD3- cells by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) gated on CD19+ CD3- cells were stained with Mouse Anti-Human CD38 PerCP-conjugated Monoclonal Antibody (Catalog # FAB2404C) and Mouse Anti-Human MS4A1/CD20 APC-conjugated Monoclonal Antibody (Catalog # FAB4225A). 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.

BACKGROUND

CD38, also known as ADP-ribosyl cyclase, is a Type II integral membrane protein. The enzyme is able to transform NAD(P)⁺ into three different products with calcium mobilizing ability, cyclic ADP-ribose, NAADP⁺, and ADP-ribose (1). CD38 is expressed in B and T lymphocytes, osteoclasts, and in cardiac, pancreatic, liver and kidney cells (2, 3). Through its production of cyclic ADP-ribose, CD38 modulates calcium-mediated signal transduction in many types of cells, including neutrophils and pancreatic β cells (4, 5).

References:

- 1. Schuber, F. and F.E. Lund (2004) Curr. Mol. Med. 4:249.
- 2. Jackson, D.G. and J.I. Bell (1990) J. Immunol. 144:2811.
- 3. Sun, L. et al. (1999) J. Cell Biol. 146:1161.
- 4. Partida-Sanchez, S. et al. (2001) Nature Med. 7:1209.
- 5. Kato, I. et al. (1995) J. Biol. Chem. 270:30045.

