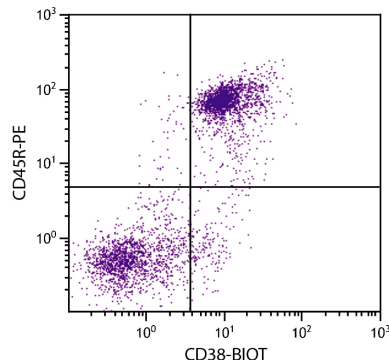




Rat Anti-Mouse CD38

Cat. No.	Format	Size
1635-01	Purified (UNLB)	0.5 mg
1635-02	Fluorescein (FITC)	0.5 mg
1635-08	Biotin (BIOT)	0.5 mg
1635-09	R-phycoerythrin (PE)	0.1 mg
1635-09L	R-phycoerythrin (PE)	0.2 mg
1635-11	Allophycocyanin (APC)	0.1 mg
1635-13	Spectral Red® (SPRD)	0.1 mg
1635-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg



BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD38-BIOT (SB Cat. No. 1635-08) and Rat Anti-Mouse CD45R-PE (SB Cat. No. 1665-09) followed by Streptavidin-FITC (SB Cat. No. 7100-02).

Overview

Clone	NIMR-5 (NIM-R5)
Isotype	Rat (LOU) IgG _{2a} K
Immunogen	BCL1 plasma membrane glycoproteins
Specificity	Mouse CD38; Mr 42 kDa
Alternate Name(s)	T10, ADP-ribosyl cyclase, cyclic ADP-ribose hydrolase

Description

Murine CD38, a type II transmembrane glycoprotein, is a bifunctional ectoenzyme capable of catabolizing nicotinamide adenine dinucleotide (NAD⁺) to cyclic ADP-ribose (cADPR) and then hydrolyzing cADPR to adenosine diphosphoribose (ADPR). It is expressed at high levels on the surface of peripheral B-lineage cells and at low density on germinal center B cells from unimmunized mice. It has also been reported to be expressed at moderate levels on NK cells, a proportion of peripheral T cells, and a subpopulation of thymocytes which are mostly TCRαβ⁺, CD4⁺, CD8⁻. Murine CD38 is also expressed by all Mac-1⁺ macrophages in the peritoneal cavities of unimmunized mice, but not by unstimulated bone-marrow-derived macrophages. Monoclonal antibodies to CD38 have been shown to induce B and T cell proliferation, protect B cells from apoptosis, and inhibit B lymphopoiesis.

Applications

FC – Quality tested ¹⁻¹⁸
 IHC-FS – Reported in literature ^{4,5}
 IP – Reported in literature ^{1-3,10,19}
 ELISA – Reported in literature ¹⁴
 Sep – Reported in literature ¹³
 Activ – Reported in literature ^{1,20-22}
 Costim – Reported in literature ^{3,23-26}
 Stim – Reported in literature ^{1,8,12,16,18,26-29}
 Apop – Reported in literature ^{14-16,18}
 Drug Delivery – Reported in literature ³⁰
 Block – Reported in literature ^{5,31-33}

Working Dilutions

Flow Cytometry	FITC and BIOT conjugates	≤ 1 µg/10 ⁶ cells
	PE, APC, and SPRD conjugates	≤ 0.2 µg/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	

Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.
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For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

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