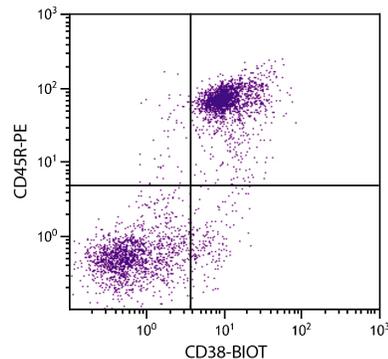




Rat Anti-Mouse CD38

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 _{2aκ}
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.

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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