

Technical Data Sheet

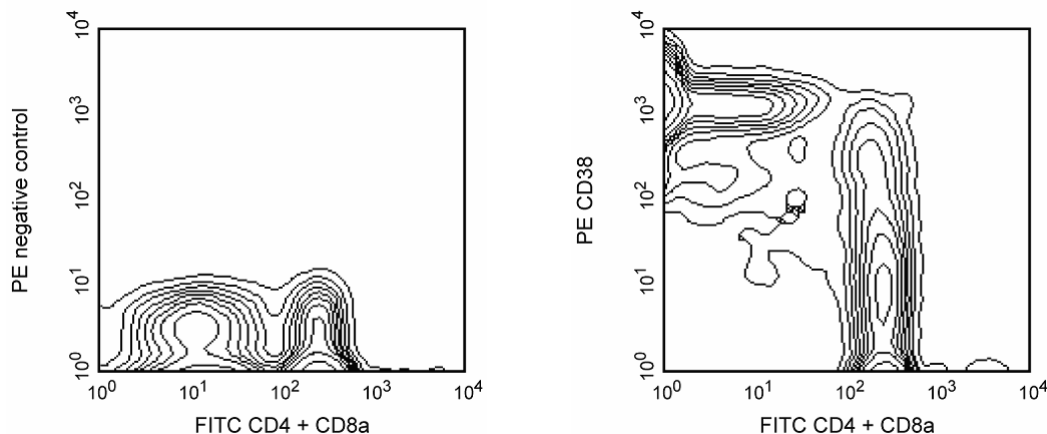
PE Rat Anti-Mouse CD38

Product Information

Material Number:	553764
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	90/CD38
Immunogen:	Mouse Bone Marrow Pre-B cells
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 90 antibody reacts with CD38, a 42 kDa transmembrane glycoprotein on immature and mature, resting and activated, B lymphocytes. In contrast to humans, CD38 expression is down-regulated on mouse germinal center B cells and plasma cells. CD38 is also expressed on a subpopulation of thymic and peripheral T cells, NK cells, and splenic macrophages. Furthermore, CD38 has been detected on bone marrow-derived hematopoietic stem cells. The CD38 molecule is reported to exhibit both cyclase and hydrolase activities and plays a role in lymphocyte activation. CD31, both human and mouse, is reported to be a ligand for human CD38.



Two-color analysis of CD38 expression on mouse spleen cells. Single-cell suspensions of BALB/c splenocytes were simultaneously stained with FITC-conjugated anti-mouse CD4 mAb RM4-5 (Cat. No. 553046/553047), FITC-conjugated anti-mouse CD8a mAb 53-6.7 (Cat. No. 553030/553031), and PE-conjugated mAb 90 (right panel). Flow cytometry was performed on a BD FACScan™ flow cytometry system.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunofluorescence	Reported

Recommended Assay Procedure:

This antibody conjugate is compatible with intracellular staining protocols using the BD Cytotfix/Cytoperm™ Kit (Cat. no. 554714).

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553046	FITC Rat Anti-Mouse CD4	0.1 mg	RM4-5
553030	FITC Rat Anti-Mouse CD8a	0.1 mg	53-6.7
554714	BD Cytotfix/Cytoperm Fixation/Permeablization Kit	250 tests	(none)
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to wwwbdbiosciences.com/pharminggen/protocols for technical protocols.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at wwwbdbiosciences.com/pharminggen/colors.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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