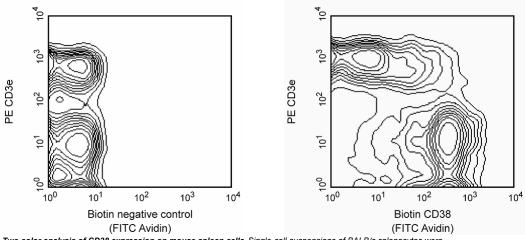
# Technical Data Sheet Biotin Rat Anti-Mouse CD38

Product Information	
Material Number:	553762
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	90/CD38
Immunogen:	Mouse Bone Marrow Pre-B cells
Isotype:	Rat IgG2a, ĸ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤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 lymphcyte 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 PE-conjugated anti-mouse CD3e mAb 145-2C11 (Cat. No. 553063/553064) and biotin-conjugated mAb 90 (right panel), followed by Avidin-FITC (Cat. No. 554057). 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 biotin under optimum conditions, and unreacted biotin was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

# Application Notes

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# Suggested Companion Products

Catalog Number	Name	Size	Clone	
553063	PE Hamster Anti-Mouse CD3e	0.1 mg	145-2C11	
554057	Avidin FITC	0.5 mg	(none)	
553928	Biotin Rat IgG2a κ Isotype Control	0.25 mg	R35-95	

# **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. 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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