Technical Data Sheet

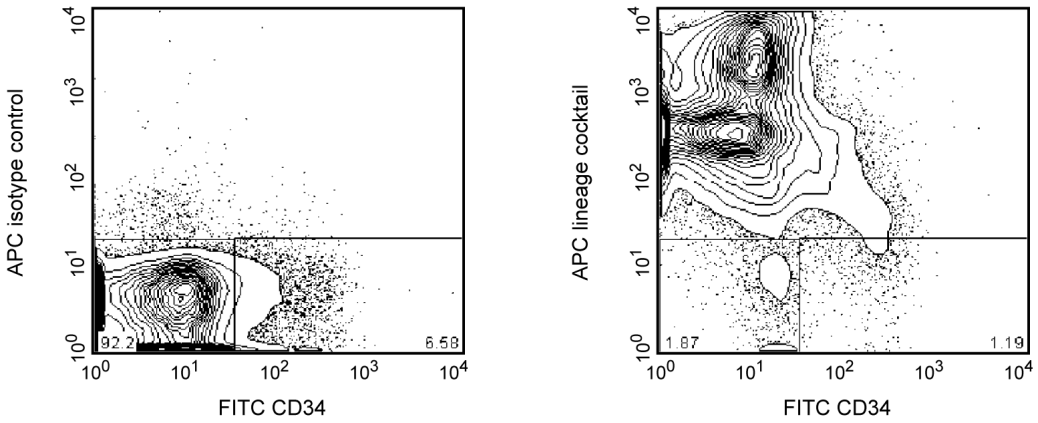
APC Mouse Lineage Antibody Cocktail, with Isotype Control

Product Information

Material Number:	**558074**
Size:	100 tests
Vol. per Test:	20 µl
Reactivity:	QC Testing: Mouse
Component:	**51-9003632**
Description:	APC Mouse Lineage Antibody Cocktail
Size:	100 tests (1 ea)
Vol. per Test:	20 µl
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.
Component:	**51-9003633**
Description:	APC Mouse Lineage Isotype Control Cocktail
Size:	100 tests (1 ea)
Vol. per Test:	20 µl
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The APC Mouse Lineage Antibody Cocktail has been designed to react with cells from the major hematopoietic lineages, such as T lymphocytes, B lymphocytes, monocytes/macrophages, NK cells, erythrocytes, and granulocytes. This pre-diluted Cocktail of five APC-conjugated antibodies is designed for the flow cytometric identification of hematopoietic progenitors in mouse bone marrow. Components include clone 145-2C11, which recognizes Mouse CD3e; M1/70, which recognizes CD11b; RA3-6B2, which recognizes CD45R/B220; TER-119, which recognizes Ly-76, mouse erythroid cells; and RB6-8C5, which recognizes Ly-6G and Ly-6C. APC Mouse Lineage Isotype Control Cocktail contains equivalent concentrations of isotype-matched negative-control immunoglobulin. Additional fluorochrome-labeled reagents may be combined with the APC Mouse Lineage Antibody Cocktail, and the APC Mouse Lineage Isotype Control Cocktail, to further characterize hematopoietic progenitor subpopulations.



Identification of CD34+ and CD34- subpopulations of hematopoietic progenitors. *BALB/c bone marrow cells were treated with Mouse BD Fc Block™ purified anti-CD16/CD32 mAb 2.4G2 (Cat. No. 553141/553142) and stained with either FITC rat IgG2a kappa isotype control (not shown) or FITC anti-CD34 mAb RAm34 (Cat. No. 553733) and with either APC Mouse Lineage Isotype Control Cocktail (left panel) or APC Mouse Lineage Antibody Cocktail (right panel). Dead cells were excluded from analysis by staining with propidium iodide (Cat. No. 556463). Flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.*

Preparation and Storage

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

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

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Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

20 µl of the antibody or isotype control cocktail is sufficient to stain each sample of 10^6 leukocytes for flow cytometric analysis. We recommend the use of Mouse BD Fc Block™ purified anti-mouse CD16/Cd32 mAb 2.4G2 (Cat. No. 553141/553142) for optimal staining. The APC Mouse Lineage Antibody Cocktail can be used to deplete cells bearing the hematopoietic lineage markers by flow cytometric or immunomagnetic (using BD™ IMag anti-Allophycocyanin (APC) Particles - DM, Cat. No. 557932) sorting. The APC fluorochrome is excited by laser lines from 595 to 647 nm, and its emission is collected in a detector for fluorescence wavelengths between 640 and 680 nm.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553733	FITC Rat anti-Mouse CD34	0.5 mg	RAM34
556463	Propidium Iodide Staining Solution	2.0 ml	(none)
557932	APC Magnetic Particles - DM	5.0 ml	E30-221

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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/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.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
6. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.

References

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Okada S, Nakauchi H, Nagayoshi K, Nishikawa S, Miura Y, Suda T. In vivo and in vitro stem cell function of c-kit- and Sca-1-positive murine hematopoietic cells. *Blood.* 1992; 80(12):3044-3050. (Biology)

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Spangrude GJ, Heimfeld S, Weissman IL. Purification and characterization of mouse hematopoietic stem cells. *Science.* 1988; 241(4861):58-62. (Biology)

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