

Technical Data Sheet

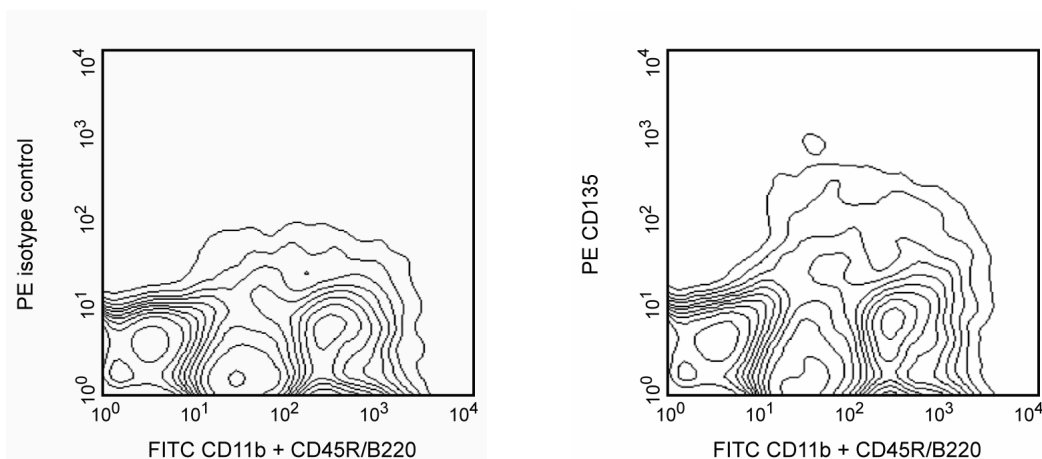
PE Rat Anti-Mouse CD135

Product Information

Material Number:	561068
Alternate Name:	FLK-2/Flt3, Ly-72
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	A2F10.1
Immunogen:	Mouse Flt-3 Transfected Cell Line
Isotype:	Rat (W1) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The A2F10 antibody reacts with Flk-2/Flt3 (Ly-72, CD135), a receptor protein tyrosine kinase closely related to c-kit, c-fms, and PDGF Receptor of the immunoglobulin superfamily. The *Flt3* message is detected in hematopoietic stem cells and primitive progenitor cells in fetal liver, adult bone marrow, and fetal and adult thymus, as well as brain, placenta, and testis; but it is absent in more mature hematopoietic cells. In flow cytometric analysis, the A2F10 antibody recognizes *Flt3*-transfected Y3 cells (rat myeloma), but not the parent cell line in addition to recognizing early B lymphoid lineage cells in juvenile and adult bone marrow. A role for CD135 in the regulation of hematopoiesis is suggested by the observations that soluble Flk-2/Flt3 ligand can both stimulate proliferation of stem cell-enriched fetal liver, fetal thymus, and adult bone marrow populations and enhance their responses to other growth factors *in vitro*. In addition, injection of Flk-2/Flt3 ligand stimulates extramedullary hematopoiesis in the mouse spleen and accumulation of dendritic cells in the hematopoietic system. mAb A2F10.1 is reported to immunoprecipitate a 150-kDa surface protein from the murine myeloblast cell line M1, which naturally expresses CD135, and to inhibit the binding of Flk-2/Flt3 ligand to CD135.



Expression of CD135 on bone-marrow leukocytes. BALB/c bone-marrow cells were stained with FITC-conjugated anti-mouse CD45R/B220 and CD11b (Integrin αM chain) monoclonal antibodies (Cat. No. 553087/553088 and 554982, respectively) and either PE-conjugated Rat IgG2a, κ isotype control mAb R35-95 (Cat. No. 553930, left panel) or PE-conjugated mAb A2F10.1 (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
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553087	FITC Rat Anti-Mouse CD45R/B220	0.1 mg	RA3-6B2
554982	FITC Mouse Anti-Rat CD11b	0.5 mg	WT.5
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 www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome 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.

References

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