Technical Data Sheet

PE Mouse Anti-Human CD135

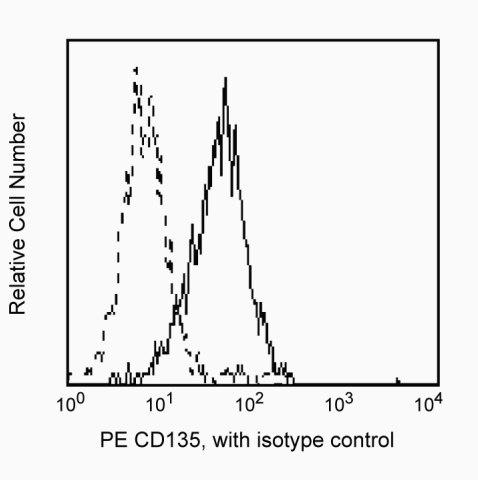
Product Information

Material Number:	**558996**
Size:	100 tests
Vol. per Test:	20 µl
Clone:	4G8
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with FMS-like tyrosine kinase 3 (flt3), a 155-160 kD, class III tyrosine kinase receptor (CD135), which is structurally related to the receptors for PDGF, SCF-1 and kit ligand. CD135 is expressed on multipotential, myelomonocytic and primitive B-cell progenitors. The most primitive hematopoietic progenitor cells express low levels of CD135. CD135 plays the role of growth factor receptor for early hematopoietic progenitors. Reports from studies with knockout mice have shown that targeted CD135 disruption impaired the development of primitive progenitor cells of all hematopoietic lineages with significant impact on lymphopoietic precursors.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only reported in the literature.



Log Fluorescence Intensity
Profile of REH cell line analyzed by flow cytometry

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

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555749	PE Mouse IgG1, κ Isotype Control	100 tests	MOPC-21

BD Biosciences

www.bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **www.bdbiosciences.com/how_to_order/**

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 cells in a 100-µl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
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.

References

Kishimoto T, von dem Borne AEG, Goyert SM,et al., ed. *Leucocyte Typing VI: White Cell Differentiation Antigens.* London: Garland Publishing; 1997. (Clone-specific)

Lyman SD, James L, Johnson L. Cloning of the human homologue of the murine flt3 ligand: a growth factor for early hematopoietic progenitor cells. *Blood.* 1994; 83(10):2795-27801.(Biology)

Mackarehtschian K, Hardin JD, Moore KA, Boast S, Goff SP, Lemischka IR. Targeted disruption of the flk2/flt3 gene leads to deficiencies in primitive hematopoietic progenitors. *Immunity.* 1995; 3(1):147-161.(Biology)

pold I, Ziegler BL, Köhler I. Functional and phenotypic characterization of cord blood and bone marrow subsets expressing FLT3 (CD135) receptor tyrosine kinase. *Blood.* 1997; 90(1):111-125.(Biology)

Rosnet O, Schiff C, Pébusque MJ. Human FLT3/FLK2 gene: cDNA cloning and expression in hematopoietic cells. *Blood.* 1993; 82(4):1110-1119.(Biology)

Rusten LS, Lyman SD, Veiby OP, Jacobsen SE. The FLT3 ligand is a direct and potent stimulator of the growth of primitive and committed human CD34+ bone marrow progenitor cells in vitro. *Blood.* 1996; 87(4):1317-1325.(Biology)