Technical Data Sheet

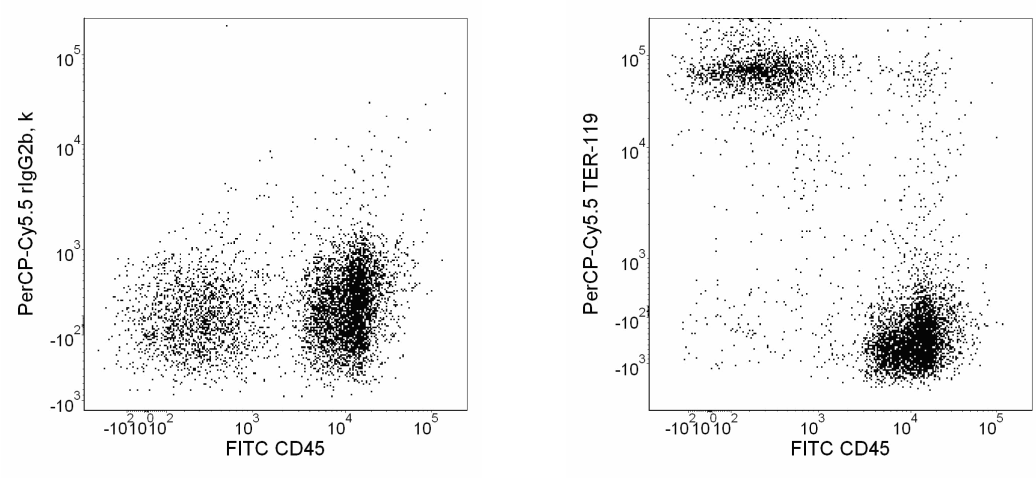
PerCP-Cy™5.5 Rat Anti-Mouse TER-119/Erythroid Cells

Product Information

Material Number:	**560512**
Alternate Name:	Lymphocyte antigen 76; Ly76; Ly-76; TER-119; Ter119
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	TER-119
Immunogen:	Mouse Fetal Liver
Isotype:	Rat (WI) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The TER-119 antibody specifically binds to a 52 kDa molecule associated with glycophorin A on cells of the erythroid lineage in embryonic yolk sac, fetal liver, newborn liver, adult bone marrow, adult peripheral blood, and adult lymphoid organs. The TER-119 antigen is expressed on erythroid cells from pro-erythroblast through mature erythrocyte stages, but not on cells with BFU-E or CFU-E activities. The TER-119 epitope is not detected on hematopoietic stem cells, lymphoid cells, myeloid cells, or erythroleukemia lines. The TER-119 mAb is a component of the "lineage cocktail" used in studies of hematopoietic progenitors to detect, or deplete cells committed to the hematopoietic lineages.



Flow cytometric analysis of TER-119 expressed on mouse bone marrow cells. *Bone marrow cells from BALB/c mice were stained with a PerCP-Cy™5.5 Rat IgG2b, κ Isotype Control (Cat. No. 550764; Left Panel) or with the PerCP-Cy™5.5 Rat Anti-Mouse TER-119/Erythroid Cells antibody (Right Panel) in conjunction with FITC Rat Anti-Mouse CD45 (Cat. No. 553080) antibody. Two-color flow cytometric dot plots were derived from gated events based on the light scattering characteristics for viable bone marrow cells. Flow cytometry was performed using a BD LSR™ II 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 PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested

BD Biosciences

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Suggested Companion Products

Catalog Number	Name	Size	Clone
550764	PerCP-Cy™5.5 Rat IgG2b, κ Isotype Control	0.1 mg	A95-1
553080	FITC Rat Anti-Mouse CD45	0.5 mg	30-F11
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. This product is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp. This product is licensed for sale only for research. It is not licensed for any other use. If you require a commercial license to use this product and do not have one return this material, unopened to BD Biosciences, 10975 Torreyana Rd, San Diego, CA 92121 and any money paid for the material will be refunded.
4. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
5. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
6. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
8. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
9. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
10. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.

References

Ikuta K, Kina T, MacNeil I, et al. A developmental switch in thymic lymphocyte maturation potential occurs at the level of hematopoietic stem cells. *Cell.* 1990; 62(5):863-874. (Clone-specific: Depletion)

Kina T, Ikuta K, Takayama E, et al. The monoclonal antibody TER-119 recognizes a molecule associated with glycophorin A and specifically marks the late stages of murine erythroid lineage. *Br J Haematol.* 2000; 109(2):280-287. (Immunogen: Immunoprecipitation, Western blot)

Kitajima K, Kojima M, Nakajima K, et al. Definitive but not primitive hematopoiesis is impaired in jumonji mutant mice. *Blood.* 1999; 93(1):87-95. (Biology)

Maraskovsky E, Brasel K, Teepe M, et al. Dramatic increase in the numbers of functionally mature dendritic cells in Flt3 ligand-treated mice: multiple dendritic cell subpopulations identified. *J Exp Med.* 1996; 184(5):1953-1962. (Clone-specific: Cytotoxicity)

Osawa M, Tokumoto Y, Nakauchi H. Hematopoietic stem cells. In: Herzenberg LA, Weir DM, Blackwell C, ed. *Weir's Handbook of Experimental Immunology, 5th Edition.* Cambridge: Blackwell Science; 1996:66.1-66.5. (Clone-specific: Depletion)

Roederer M, Kantor AB, Parks DR, Herzenberg LA. Cy7PE and Cy7APC: bright new probes for immunofluorescence. *Cytometry.* 1996; 24(3):191-197. (Methodology: Flow cytometry)