Technical Data Sheet

BV605 Rat Anti-Mouse TER-119/Erythroid Cells

Product Information

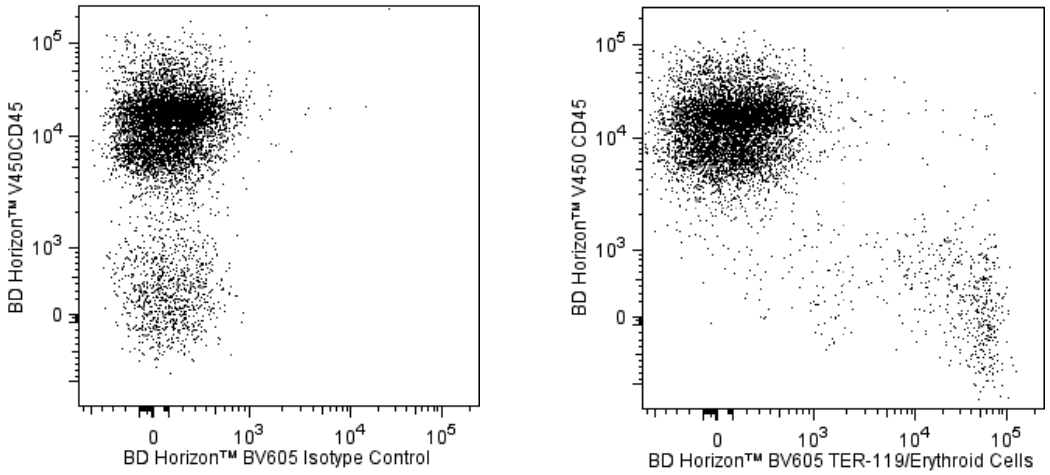
Material Number:	**563323**
Alternate Name:	Lymphocyte antigen 76; Ly76; Ly-76; TER-119; Ter119
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	TER-119
Immunogen:	Mouse Fetal Liver
Isotype:	Rat (WI) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% 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.

This antibody is conjugated to BD Horizon BV605 which is part of the BD Horizon Brilliant™ Violet family of dyes. With an Ex Max of 407-nm and Em Max of 602-nm, BD Horizon BV605 can be excited by a violet laser and detected with a standard 610/20-nm filter set. BD Horizon BV605 is a tandem fluorochrome of BD Horizon BV421 and an acceptor dye with an Em max at 605-nm. Due to the excitation of the acceptor dye by the green (532 nm) and yellow-green (561 nm) lasers, there will be significant spillover into the PE and BD Horizon PE-CF594 detectors off the green or yellow-green lasers. BD Horizon BV605 conjugates are very bright, often exhibiting brightness equivalent to PE conjugates and can be used as a third color off of the violet laser.

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).



Two-color flow cytometric analysis of TER-119/Erythroid Cells expressed on mouse bone marrow cells. *Bone marrow cells from C57BL/6 mice were preincubated with Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™) antibody (Cat. no. 553141/553142). The cells were then stained with BD Horizon™ V450 Rat Anti-Mouse CD45 antibody (Cat. No. 560501) and either BD Horizon™ BV605 Rat IgG2b, κ Isotype Control (Cat. No. 563145; Left Panel) or with the BD Horizon™ BV605 Rat Anti-Mouse TER-119/Erythroid Cells antibody (Cat. No. 563323; Right Panel). Two-color flow cytometric dot plots showing the expressed levels of CD45 versus TER-119 (or Ig isotype control staining) were derived from gated events with the light scattering characteristics of viable bone marrow cells. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometry System.*

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Preparation and Storage

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

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with BD Horizon™ BV605 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV605 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
563145	BV605 Rat IgG2b, κ Isotype Control	50 µg	R35-38
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553142	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.5 mg	2.4G2
560501	V450 Rat Anti-Mouse CD45	50 µg	30-F11
563794	Brilliant Stain Buffer	5 mL	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
5. 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.
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 Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. Although every effort is made to minimize the lot-to-lot variation in the efficiency of the fluorochrome energy transfer, differences in the residual emission from BD Horizon™ BV421 may be observed. Therefore, we recommend that individual compensation controls be performed for every BD Horizon™ BV605 conjugate.
9. CF™ is a trademark of Biotium, Inc.

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. (Biology)

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. (Clone-specific: Flow cytometry, Immunohistochemistry)

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: Cell separation, Cytotoxicity, Depletion, Flow cytometry)

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: Cell separation, 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)

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