

Technical Data Sheet

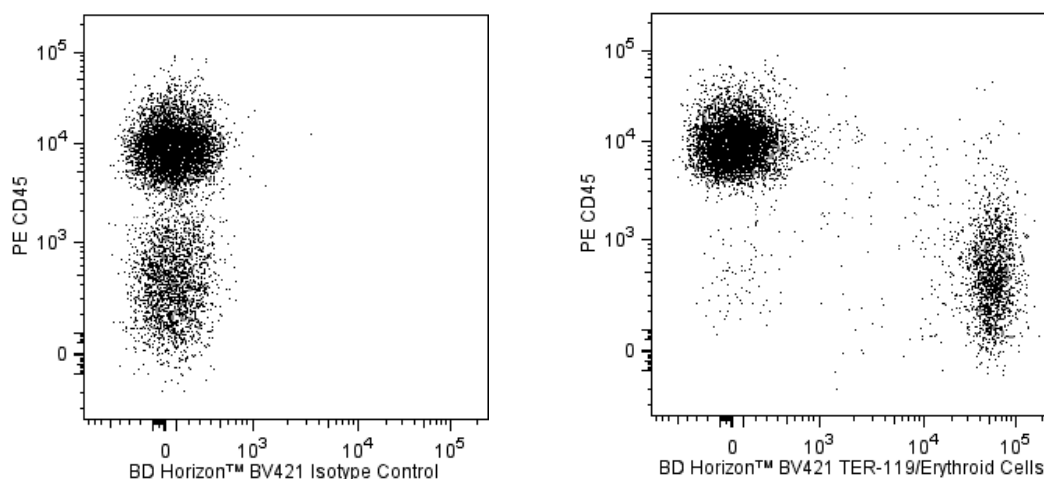
BV421 Rat Anti-Mouse TER-119/Erythroid Cells**Product Information**

| | |
|-------------------------|---|
| Material Number: | 563998 |
| 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.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.



Two-color flow cytometric analysis of TER-119/Erythroid Cells expressed on mouse bone marrow cells. Mouse bone marrow cells were preincubated with Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™) antibody (Cat. no. 553141/553142). The cells were then stained with PE Rat Anti-Mouse CD45 antibody (Cat. No. 553081/561087) and either BD Horizon™ BV421 Rat IgG2b, κ Isotype Control (Cat. No. 562603; Left Panel) or BD Horizon™ BV421 Rat Anti-Mouse TER-119/Erythroid Cells antibody (Cat. No. 563998; Right Panel). Two-color flow cytometric dot plots showing the expressed levels of CD45 versus TER-119/Erythroid Cells (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.

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™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|--|------------|--------|
| 554656 | Stain Buffer (FBS) | 500 ml | (none) |
| 554657 | Stain Buffer (BSA) | 500 ml | (none) |
| 562603 | BV421 Rat IgG2b, κ Isotype Control | 50 μ g | 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 |

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. Brilliant Violet™ 421 is a trademark of Sirigen.
4. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

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)

Kina T, Ikuta K, Takayama E, et al. The monoclonal antibody TER-119 recognizes a molecule associated with glyophorin 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)

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