

CD103 (Integrin alpha E) Monoclonal Antibody (B-Ly7), Super Bright™ 780, eBioscience™

Product Details	
Size	25 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	B-Ly7
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_2762587

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	2 Publications

Product Specific Information

Description: The B-Ly7 monoclonal antibody reacts with human CD103, the alpha E integrin. CD103 non-covalently associates with integrin beta 7. CD103 is expressed mainly on intraepithelial lymphocytes and a small subset of peripheral lymphocytes. CD103 is also expressed by hairy cell leukemia (HCL) and by some chronic B cell lymphocytic leukemias. In vitro stimulation of human T cells with mitogens induces upregulation of CD103. Epithelial cell antigen, E-cadherin, binds to CD103 and mediates homing of lymphocytes to the intestinal epithelium.

Applications Reported: This B-Ly7 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This B-Ly7 antibody has been pre-diluted and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This may be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres ((Product # 01-2222-42)) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads ((Product # A10497)).

Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

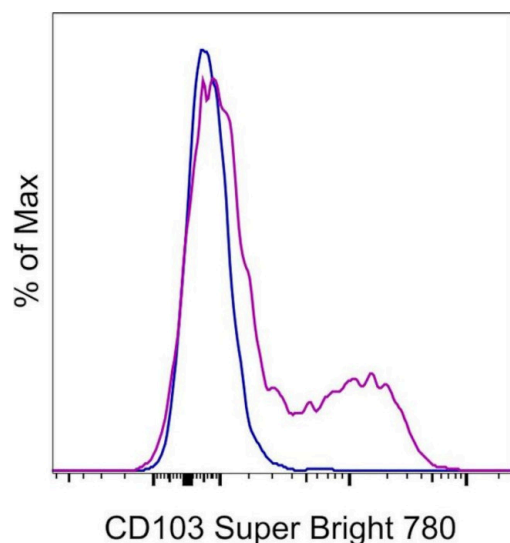
When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 780 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD103 (Integrin alpha E) Monoclonal Antibody (B-Ly7), Super Bright™ 780, eBioscience™



CD103 (Integrin alpha E) Antibody (78-1038-41) in Flow

Normal human peripheral blood cells were stimulated for 72 hours with PHA-L (Product # 00-4977-93). Cells were then stained with Mouse IgG1 kappa Isotype Control, Super Bright 780 (Product # 78-4714-82) (blue histogram) or CD103 Monoclonal Antibody, Super Bright 780 (purple histogram). Total viable cells were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

Flow Cytometry (2)

Journal of experimental & clinical cancer research : CR

NK cell-triggered CCL5/IFN-CXCL9/10 axis underlies the clinical efficacy of neoadjuvant anti-HER2 antibodies in breast cancer.

"Published figure using CD103 (Integrin alpha E) monoclonal antibody (Product # 78-1038-42) in Flow Cytometry"

Authors: Santana-Hernández S,Suarez-Olmos J,Servitja S,Berenguer-Molins P,Costa-Garcia M,Comerma L,Rea A,Perera-Bel J,Menendez S,Arpí O,Bermejo B,Martínez MT,Cejalvo JM,Comino-Méndez I,Pascual J,Alba E,López-Botet M,Rojo F,Rovira A,Albanell J,Muntasell A

Year
2024

Nature communications

Neoadjuvant anti-OX40 (MEDI6469) therapy in patients with head and neck squamous cell carcinoma activates and expands antigen-specific tumor-infiltrating T cells.

"Published figure using CD103 (Integrin alpha E) monoclonal antibody (Product # 78-1038-42) in Flow Cytometry"

Authors: Duhon R,Ballesteros-Merino C,Frye AK,Tran E,Rajamanickam V,Chang SC,Koguchi Y,Bifulco CB,Bernard B,Leidner RS,Curti BD,Fox BA,Urba WJ,Bell RB,Weinberg AD

Year
2021

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