

# CD103 (Integrin alpha E) Monoclonal Antibody (B-Ly7), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Non-human primate, Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	B-Ly7
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467412

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Flow Cytometry (Flow)	0.5 µg/test	9 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.

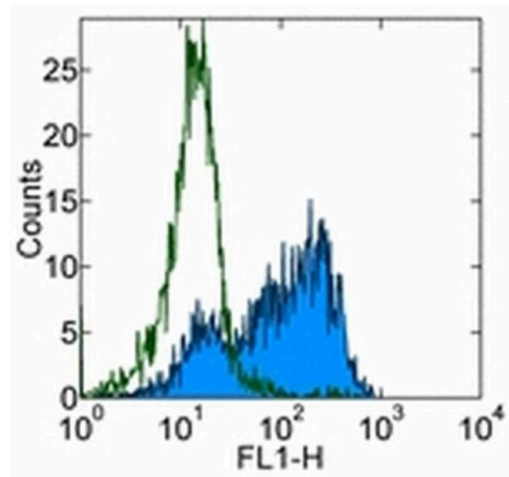
**Applications Reported:** B-Ly7 has been reported for use in flow cytometric analysis, and immunohistochemical staining of frozen tissue sections.

**Applications Tested:** The B-Ly7 antibody has been tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at less than or equal to 0.5 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

**Filtration:** 0.2 µm post-manufacturing filtered.



**CD103 (Integrin alpha E) Antibody (14-1038-82) in Flow**  
Staining of 3-day PHA-stimulated normal human peripheral blood cells with 0.25 µg of Mouse IgG1 K Isotype Control Purified (Product # 14-4714-82) (open histogram) or 0.25 µg of Anti-Human CD103 (Integrin alpha E) Purified (filled histogram) followed by Anti-Mouse IgG FITC (Product # 11-4011-85). Total viable cells were used for analysis.

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9 References

Flow Cytometry (9)

<p>Nature communications</p> <p><b>Neoadjuvant anti-OX40 (MEDI6469) therapy in patients with head and neck squamous cell carcinoma activates and expands antigen-specific tumor-infiltrating T cells.</b></p> <p>"Published figure using CD103 (Integrin alpha E) monoclonal antibody (Product # 14-1038-82) in Flow Cytometry"</p> <p>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</p>	<p>Year</p> <p>2021</p>
<p>Nature communications</p> <p><b>Co-expression of CD39 and CD103 identifies tumor-reactive CD8 T cells in human solid tumors.</b></p> <p>"Published figure using CD103 (Integrin alpha E) monoclonal antibody (Product # 14-1038-82) in Flow Cytometry"</p> <p>Authors: Duhon T,Duhon R,Monter R,Moses J,Moudgil T,de Miranda NF,Goodall CP,Blair TC,Fox BA,McDermott JE,Chang SC,Grunkemeier G,Leidner R,Bell RB,Weinberg AD</p>	<p>Year</p> <p>2018</p>

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