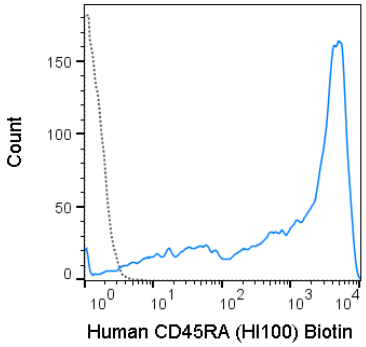
TECHNICAL DATA SHEET

Biotin Anti-Human CD45RA (HI100)

Catalog Number: 30-0458

PRODUCT INFORMATION

Contents:	Biotin Anti-Human CD45RA (HI100)
Isotype:	Mouse IgG2b, kappa
Concentration:	0.5 mg/mL
Clone:	HI100
Reactivity:	Human
Use By:	12 months from date of receipt
Storage Conditions:	2-8°C
Formulation:	10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, pH 7.2



Human peripheral blood lymphocytes were stained with 0.5 ug Biotin Anti-Human CD45RA (30-0458) (solid line) or 0.5 ug Biotin Mouse IgG2b isotype control (dashed line), followed by Streptavidin PE.

DESCRIPTION

The HI100 antibody reacts with the human CD45 isoform known as CD45RA, a protein tyrosine phosphatase of 220 kDa. CD45 is one of the most abundant hematopoietic markers, and is expressed on all leukocytes (the Leukocyte Common Antigen, LCA). Various isoforms are generated and expressed in cell-specific patterns. With their broad cell distribution, CD45 isoforms are critical for many leukocyte functions, regulating signal transduction and cell activation associated with the T cell receptor, B cell receptor, and IL-2 receptor. Other forms of CD45, with restricted cellular expression, include CD45R (B220), CD45RB, CD45RO and others.The HI100 antibody is widely used as a marker for human CD45RA expression on naive and activated T cells, B cells, and monocytes.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted biotin removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using an appropriate cell type (as indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

REFERENCES

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Lopez-Verges S, Milush JM, Schwartz BS, Pando MJ, Jarjoura J, York VA, Houchins JP, Miller S, Kang S-M, Norris PJ, Nixon DF, and Lanier LL. 2011. Proc. Natl. Acad. Sci. 108: 14725-14732. (Flow Cytometry)
Imanguli MM, Swaim WD, League SC, Gress RE, Pavletic SZ, and Hakim FT. 2009. Blood. 113: 3620-3630. (Immunohistochemistry - paraffin embedded tissue)
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Weninger W, Carlsen HS, Goodarzi M, Moazed F, Crowley MA, Baekkevold ES, Cavanagh LL, and von Andrian U. 2003. J. Immunol. 170: 4638-4648. (Immunohistochemistry – frozen tissue.
Yamada T, Zhu D, Saxon A, and Zhang K. 2002. J. Biol. Chem. 277(32): 28830-28835. (in vitro blocking)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.