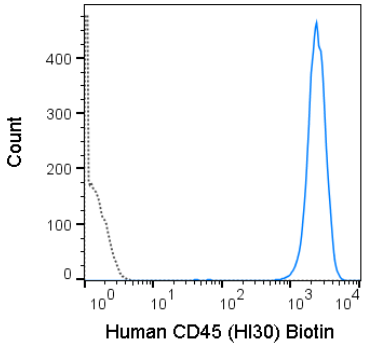
TECHNICAL DATA SHEET

Biotin Anti-Human CD45 (HI30)

Catalog Number: 30-0459

PRODUCT INFORMATION

Contents:	Biotin Anti-Human CD45 (HI30)
Isotype:	Mouse IgG1, kappa
Concentration:	0.5 mg/mL
Clone:	HI30
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 0.25 ug Biotin Anti-Human CD45 (30-0459) (solid line) or 0.25 ug Biotin Mouse IgG1 isotype control (dashed line), followed by Streptavidin PE.

DESCRIPTION

The HI30 antibody reacts with human CD45, one of the most abundant hematopoietic markers and one that is expressed on all leukocytes (the Leukocyte Common Antigen, LCA). CD45 is a protein tyrosine phosphatase existing in several isoforms, each being generated and expressed in cell-specific patterns. With its broad cell distribution, CD45 is 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), CD45RA, CD45RB, CD45RO and others.The HI30 antibody is widely used as a marker for human CD45 expression on T cells, B cells, monocytes, macrophages, and NK cells.

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

Strowig T, Rongvaux A, Rathinam C, Takizawa H, Borsotti C, Philbrick W, Eynon EE, Manz MG, and Flavell RA. 2011. Proc. Natl. Acad. Sci. 108: 13218-13223. (Flow Cytometry)Kim M-H, Suh H-S, Si Q, Terman BE, and Lee SC. 2006. J. Virol. 80: 62-72. (in vitro blocking, Western Blot)Zhang M and Varki A. 2004. Glycobiology. 14: 939-949. (Immunoprecipitation)Gelbmann CM, Leeb SN, Vogl D, Maendel M, Herfarth H, Scholmerich J, Falk W, and Rogler G. 2003. Gut. 52:1448-1456. (Immunocytochemistry)Yamada T, Zhu D, Saxon A, and Zhang K. 2002. J. Biol. Chem. 277(32): 28830-28835. (in vitro blocking)Esser MT, Graham DR, Coren LV, Trubey CM, Bess JW, Arthur LO, Ott DE, and Lifson JD. 2001. J. Virol. 75(13)6173-6182. (Western Blot)Goto E, Kohrogi H, Hirata N, Tsumori K, Hirosako S, Hamamoto J, Fujii K, Kawano O, and Ando M. 2000. Am. J. Respir. Cell Mol. Biol. 22: 405. (Immunohistochemistry – frozen tissue)Esser MT, Graham DR, Coren LV, Trubey CM, Bess JW, Arthur LO, Ott DE, and Lifson JD. 2001. J. Virol. 75(13)6173-6182. (Western Blot)

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.