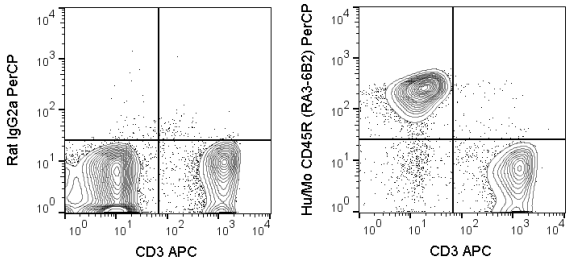
TECHNICAL DATA SHEET

PerCP Anti-Human/Mouse CD45R (B220) (RA3-6B2)

Catalog Number: 67-0452

PRODUCT INFORMATION

Contents:	PerCP Anti-Human/Mouse CD45R (B220) (RA3
Isotype:	Rat IgG2a, kappa
Concentration:	0.2 mg/mL
Clone:	RA3-6B2
Reactivity:	Human, Mouse
Use By:	6 months from date of receipt
Storage Conditions:	2-8°C protected from light
Formulation:	10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with APC Anti-Mouse CD3 (20-0031) and 0.5 ug PerCP Anti-Human/Mouse CD45R (B220) (67-0452) (right panel) or 0.5 ug PerCP Rat IgG2a isotype control (left panel).

DESCRIPTION

The RA3-6B2 antibody reacts with the human and mouse CD45 isoform known as CD45R, or B220, 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, all critical for leukocyte function. In mouse, the CD45R/B220 isoform is predominantly found on B cells, at varying levels on all stages from pro-B cells to activated B cells, and may also be detected on certain T cell and NK cell subsets. It is of note that B220 is not similarly expressed on human B cells, where it appears to be differentiation-specific and therefore expressed on only some B cell subsets. Other forms of CD45 with restricted cellular expression include CD45RA, CD45RB, CD45RO and several others.The RA3-6B2 antibody is one of the most consistently used leukocyte markers for B cells, T cell subsets and NK cell subsets in human and mouse. This antibody has also been reported as cross-reactive with feline CD45R/B220.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye 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 mouse spleen cells, or an appropriate cell type (where 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

Willinger T and Flavell RA. 2012. Proc. Natl. Acad. Sci. 109:8670-8675. (Flow cytometry)Meredith MM, Liu K, Darrasse-Jeze G, Kamphorst AO, Schreiber HA, Guermonprez P, Idoyaga J, Cheong C, Yao K-H, Niec RE, and Nussenzweig MC. 2012. J. Exp. Med. 209: 1153-1165. (Immunofluorescence microscopy: acetone-fixed frozen tissue)Becker-Herman A, Meyer-Bahlburg A, Schwartz MA, Jackson SW, Hudkins KL, Liu C, Sather BD, Khim S, Liggitt D, Song W, Silverman GJ, Alpers CE and Rawlings DJ. 2011. J. Exp. Med. 208:2033-2042. (Immunofluorescence microscopy – OCT embedded frozen tissue)Bertossi A, Aichinger M, Sansonetti P, Lech , Neff F, Pal M, Wunderlich FT, Anders H, Klein L, and Schmidt-Supprian M. 2011. J. Exp. Med. 208:1749-1756. (Immunofluorescence microscopy)De Clercq S, Gembarska A, Denecker G, Maetens M, Naessens M, Haigh K, Haigh JJ, and Marine J-C. 2010. Mol. Cell. Biol. 30:5394-5405. (Western Blot)Nutt SL, Metcalf D, D'Amico A, Polli M, and Wu L. 2005. J. Exp. Med. 201:221-231. (Immunomagnetic bead depletion)Cappione AJ, Pugh-Bernard AE, Anolik JH, and Sanz I. 2004. J. Immunol. 172: 4298-4307. (Immunoprecipitation)Monteith CE, Chelack BJ, Davis WC, and Haines DM. 1996. Can. J. Vet. Res. 60(3): 193-198. (Immunohistochemistry – feline tissue)Whiteland JL, Nicholls SM, Shimeld C, Easty DL, Williams NA, and Hill TJ. 1995. J. Histochem. Cytochem. 43:313-320. (Immunohistochemistry – frozen tissue, paraffin embedded tissue)Domiati-Saad R, Ogle EW, and Justement LB. 1993. J. Immunol. 151: 5936-5947. (in vivo 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.