

## **Product Data Sheet**

## PE anti-human CD45RA

Catalog # / Size: 304107 / 25 tests

304108 / 100 tests

Clone: HI100

**Isotype:** Mouse IgG2b,  $\kappa$ 

Workshop Number: IV N906

Reactivity: Human, Cross-Reactivity: Chimpanzee

Preparation: The antibody was purified by affinity chromatography, and conjugated with

PE under optimal conditions. The solution is free of unconjugated PE and

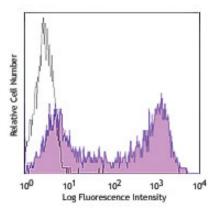
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Human peripheral blood lymphocytes were stained with CD45RA (clone HI100) PE (filled histogram) or mouse IgG2b, κ PE isotype control (open histogram).

## **Applications:**

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent

staining with flow cytometric analysis. Test size products are transitioning from 20 µl to 5 µl per test. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for

optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

Application Notes: Additional reported applications (for relevant formats of this clone) include: inhibition of CD45 functions<sup>2</sup>, and

immunohistochemical staining of frozen tissue sections<sup>3</sup> and formalin-fixed paraffin-embedded tissue sections<sup>4</sup>.

Application References: 1. Knapp W, et al. 1989. Leucocyte Typing IV. Oxford University Press. New York.

2. Yamada T, et al. 2002. J. Biol. Chem. 277:28830. (WB, Block) 3. Weninger W, et al. 2003 J. Immunol. 170:4638. (IHC)

4. Imanguli MM, et al. 2009. Blood. 113:3620 (IHC) 5. Roque S, et al. 2007. J. Immunol. 178:8028. (FC) PubMed 6. Smeltz RB. 2007. J. Immunol. 178:4786. (FC) PubMed 7. Palendia U, et al. 2008. Blood (FC) PubMed

8. Kuttruff S, et al. 2009. Blood 113:358. (FC) PubMed

10. Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) PubMed 11. Alanio C, *et al.* 2010. *Blood* 115:3718. (FC) PubMed

12. lannello A, et al. 2010. J. Immunol. 184:114. (FC) PubMed

13. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC) 14. Guereau-de-Arellan M, et al. 2011. Brain. PubMed.

Description: CD45RA is a 205-220 kD single chain type I glycoprotein. It is an exon 4 splice variant of the tyrosine phosphatase

CD45. The CD45RA isoform is expressed on resting/naïve T cells, medullary thymocytes, B cells and monocytes.

CD45RA enhances both T cell receptor and B cell receptor signaling. CD45 non-covalently associates with

lymphocyte phosphatase-associated phosphoprotein (LPAP) on T and B lymphocytes. CD45 has been reported to be associated with several other cell surface antigens including CD1, CD2, CD3, and CD4. CD45 has also been reported

to bind galectin-1. CD45 isoform expression can change in response to cytokines.

Antigen References: 1. Thomas M. 1989. Annu. Rev. Immunol. 7:339.

2. Trowbridge I, et al. 1994. Annu. Rev. Immunol.12:85.

**Related Products: Product** PE anti-human CD45 HI30 PE anti-human CD45RO UCHL1 PE Mouse IgG2b,  $\kappa$  Isotype Ctrl

Cell Staining Buffer RBC Lysis Buffer (10X) PE anti-human CD45RB

Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone Application FC, ICFC FC, ICC, ICFC FC, ICFC MPC-11 MEM-55 FC, ICC, ICFC



