

# Product Data Sheet

## PerCP/Cy5.5 anti-human CD45RA

**Catalog # / Size:** 304121 / 25 tests  
304122 / 100 tests

**Clone:** HI100

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

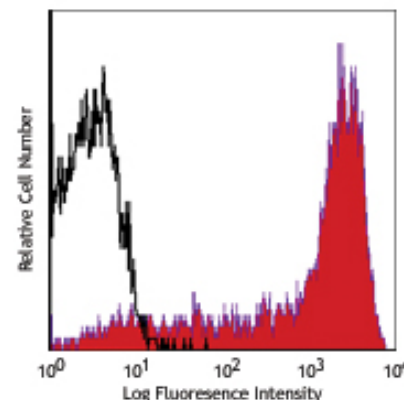
**Workshop Number:** IV N906

**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 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 CD45RA antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with HI100 PerCP/Cy5.5

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this CD45RA antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is 5  $\mu$ l per million cells or 5  $\mu$ l per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and 564 nm and a maximum emission of 690 nm.

**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>.

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**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. Palendira 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. Iannello 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.

15. Sammicheli S, *et al.* 2012. *J Autoimmun.* 38:304. PubMed.

16. Bacher P, *et al.* 2013. *J. Immunol.* 190:3967. 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**  
Cell Staining Buffer  
RBC Lysis Buffer (10X)  
PerCP/Cy5.5 Mouse IgG2b,  $\kappa$  Isotype Ctrl  
Human TruStain FcX™ (Fc Receptor Blocking Solution)

### Clone

MPC-11

### Application

FC, ICC, ICFC  
FC, ICFC  
FC, ICFC  
FC, ICC, ICFC



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