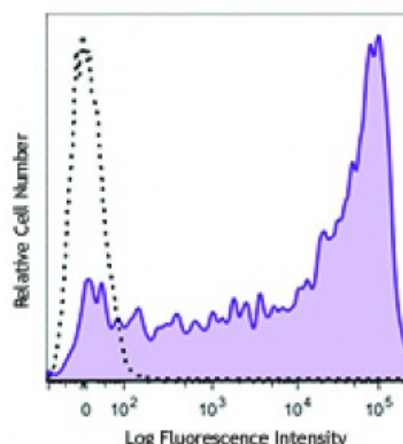


PE/Dazzle™ 594 anti-human CD45RA

Catalog # / Size:	2120730 / 100 tests 2120725 / 25 tests
Clone:	HI100
Isotype:	Mouse IgG2b, κ
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Workshop Number:	IV N906
Concentration:	Lot-specific



Human peripheral blood granulocytes were stained with CD45RA PE/Dazzle™ 594 (clone HI100) (filled histogram) or mouse IgG2b, κ PE/Dazzle™ 594 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application Notes: Additional reported applications (for relevant formats of this clone) include: inhibition of CD45 functions², immunohistochemical staining of frozen tissue sections³ and formalin-fixed paraffin-embedded tissue sections⁴, and immunofluorescence^{15,16}.

- Application References:**
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 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](#)
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 14. Guereau-de-Arellan M, *et al.* 2011. *Brain.* 134:3578. [PubMed](#)
 15. Canque B, *et al.* 2000. *Blood* 96:3748. (IF)
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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 1. Thomas M. 1989. *Annu. Rev. Immunol.* 7:339.
References: 2. Trowbridge I, *et al.* 1994. *Annu. Rev. Immunol.* 12:85.