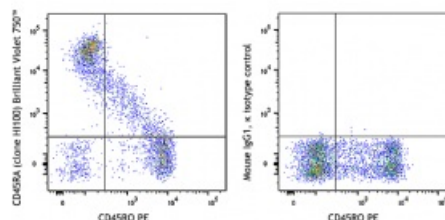


Brilliant Violet 750™ anti-human CD45RA**Catalog # /** 2120830 / 100 tests**Size:** 2120825 / 25 tests**Clone:** HI100**Isotype:** Mouse IgG2b, κ **Immunogen:** Human myeloid leukaemia cells.**Reactivity:** Human, Non-human primate**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 750™ and unconjugated antibody.**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).**Workshop Number:** IV N906**Concentration:** Lot-specific

Human peripheral blood lymphocytes were stained with CD45RO PE and CD45RA (clone HI100) Brilliant Violet 750™ (left) or Mouse IgG1, κ Brilliant Violet 450™ isotype control (right)

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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.

Brilliant Violet 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 750™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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 immunocytochemistry^{15,16}.

**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-F)
4. Imanguli MM, et al. 2009. *Blood.* 113:3620 (IHC-P)
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](#)
9. Thakral D, et al. 2008. *J. Immunol.* 180:7431. (FC) [PubMed](#)
10. Alanio C, et al. 2010. *Blood* 115:3718. (FC) [PubMed](#)
11. Iannello A, et al. 2010. *J. Immunol.* 184:114. (FC) [PubMed](#)
12. Yoshino N, et al. 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
13. Guereau-de-Arellan M, et al. 2011. *Brain.* 134:3578. [PubMed](#)
14. Canque B, et al. 2000. *Blood* 96:3748. (ICC)
15. Imanguli MM, et al. 2009. *Blood* 13:3620. (ICC)
16. Stoeckius M, et al. 2017. *Nat. Methods.* 14:865. (PG)
17. Peterson VM, et al. 2017. *Nat. Biotechnol.* 35:936. (PG)

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.