

Product Data Sheet

Alexa Fluor® 700 anti-human CD45RA

Catalog # / Size: 304119 / 25 µg

304120 / 100 µg

Clone: HI100

Isotype: Mouse IgG2b, κ

Workshop Number: IV N906

Reactivity: Human, Cross-Reactivity: Chimpanzee

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

Alexa Fluor® 700 under optimal conditions. The solution is free of

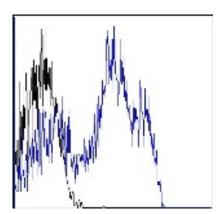
unconjugated Alexa Fluor® 700.

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

Concentration: 0.5 mg/ml

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 stained with HI100 Alexa Fluor® 700

Applications:

Applications: FC - Quality tested

Recommended Usage: This reagent is developed for immunofluorescent staining for flow cytometric analysis; the suggested use of this

reagent is ≤1.0 µg per million cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal

performance for each application.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Alexa Fluor® 700 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 700 dye antibody conjugates

are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with

microarrays and high content screening, and are covered by pending and issued patents. Application Notes: Additional reported applications (for relevant formats of this clone) include: inhibition of CD45 functions², and

immunohistochemical staining of frozen tissue sections³ and formalin-fixed paraffin-embedded tissue sections⁴.

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. Palendra U, et al. 2008. Blood (FC) PubMed 8. Ketter HS 2008. Blood (FC) PubMed 9. Ketter HS 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. 2010. 3. Illimuno. 104:114. (1C) Fubilit 13. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC) 14. Guereau-de-Arellan M, et al. 2011. Brain. PubMed. 15. Alexander T, et al. 2012. Ann Rheum Dis. PubMed. 16. Eriksson EM, et al. 2012. PLoS One. 7:e51696. PubMed.

17. Long HM, et al. 2013. J Exp Med. PubMed. 18. Afzali B, et al. 2013. Clin J Am Soc Nephrol. 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 Clone Application Cell Staining Buffer FC, ICC, ICFC RBC Lysis Buffer (10X)

> For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



Alexa Fluor® 700 Mouse IgG2b, κ Isotype Ctrl Human TruStain FcXTM (Fc Receptor Blocking Solution)

MPC-11

FC, ICFC FC, ICC, ICFC



