

Product Data Sheet

Alexa Fluor® 488 anti-human CD45RO

Catalog # / Size: 304212 / 100 tests

Clone: UCHL1

Isotype: Mouse IgG2a, κ

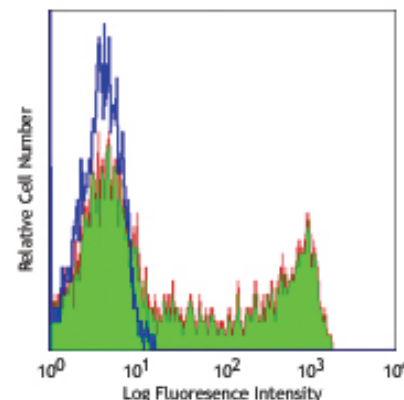
Workshop Number: IV N31

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

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

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 stained with UCHL1 Alexa Fluor® 488

Applications:

Applications: FC - Quality tested

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

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

** Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 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: The UCHL1 antibody is commonly used in combination with antibodies against CD45RA to discern memory and naïve T cells. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections⁵ and formalin-fixed paraffin-embedded tissue sections⁴, Western blotting², and immunoprecipitation³.

- Application References:**
1. Knapp W, et al. Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York. (FC)
 2. Ishii T, et al. 2001. *P. Natl. Acad. Sci. USA* 98:12138. (WB)
 3. Ponsford M, et al. 2001. *Clin. Exp. Immunol.* 124:315. (IP)
 4. Yamada M, et al. 1996. *Stroke* 27:1155. (IHC)
 5. Sakkas LI, et al. 1998. *Clin. Diagn. Lab. Immunol.* 5:430. (IHC)
 6. Baba N, et al. 2010. *Int. Immunol.* 22:237. PubMed
 7. Thakral D, et al. 2008. *J. Immunol.* 180:7431. (FC) PubMed
 8. Weiss L, et al. 2010. *P. Natl. Acad. Sci. USA* 107:10632. PubMed
 9. Wu YY, et al. 2007. *Infect. Immun.* 75:4357. PubMed
 10. Mozaffarian N, et al. 2008. *Rheumatology* 47:1335. PubMed
 11. Roque S, et al. 2007. *J. Immunol.* 178:8028. PubMed
 12. Yoshino N, et al. 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

Description: CD45RO is a 180 kD single chain membrane glycoprotein. It is a splice variant of tyrosine phosphatase CD45, lacking the A, B, and C determinants. The CD45RO isoform is expressed on activated and memory T cells, some B cell subsets, activated monocytes/macrophages, and granulocytes. CD45RO enhances both T cell receptor and B cell receptor signaling mediated activation. CD45 and its isoforms non-covalently associate 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 and CD22. 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)

Clone

Application
 FC, ICC, ICFC
 FC, ICFC



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Alexa Fluor® 488 Mouse IgG2a, κ Isotype Ctrl
Human TruStain FcX™ (Fc Receptor Blocking Solution)

MOPC-173

FC, ICFC
FC, ICC, ICFC



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