

Alexa Fluor® 700 anti-human CD45RO

Catalog # / Size: 304217 / 25 µg
304218 / 100 µg

Clone: UCHL1

Isotype: Mouse IgG2a, κ

Workshop Number: IV N31

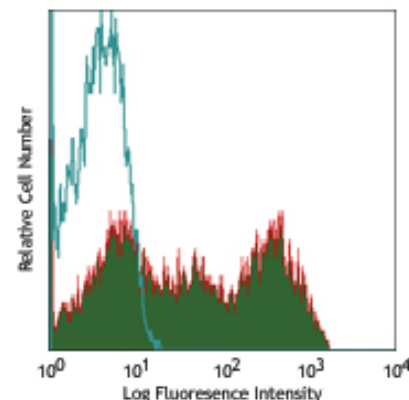
Reactivity: Human, **Cross-Reactivity:** Chimpanzee, Common Marmoset

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 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 UCHL1 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 ≤2.0 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.

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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 sections⁹ and formalin-fixed paraffin-embedded tissue sections⁴, Western blotting², and immunoprecipitation³.

- Application References:**
- Knapp W, *et al.* Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York. (FC)
 - Ishii T, *et al.* 2001. *P. Natl. Acad. Sci. USA* 98:12138. (WB)
 - Ponsford M, *et al.* 2001. *Clin. Exp. Immunol.* 124:315. (IP)
 - Yamada M, *et al.* 1996. *Stroke* 27:1155. (IHC)
 - Sakkas LI, *et al.* 1998. *Clin. Diagn. Lab. Immunol.* 5:430. (IHC)
 - Baba N, *et al.* 2010. *Int. Immunol.* 22:237. PubMed
 - Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) PubMed
 - Weiss L, *et al.* 2010. *P. Natl. Acad. Sci. USA* 107:10632. PubMed
 - Wu YY, *et al.* 2007. *Infect. Immun.* 75:4357. PubMed
 - Mozaffarian N, *et al.* 2008. *Rheumatology* 47:1335. PubMed
 - Roque S, *et al.* 2007. *J. Immunol.* 178:8028. PubMed
 - 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:**
- Thomas M. 1989. *Annu. Rev. Immunol.* 7:339.
 - 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)		FC, ICFC
Alexa Fluor® 700 Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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