

Purified anti-human CD45RO

Catalog # / Size: 304202 / 100 µg

Clone: UCHL1

Isotype: Mouse IgG2a, κ

Workshop Number: IV N31

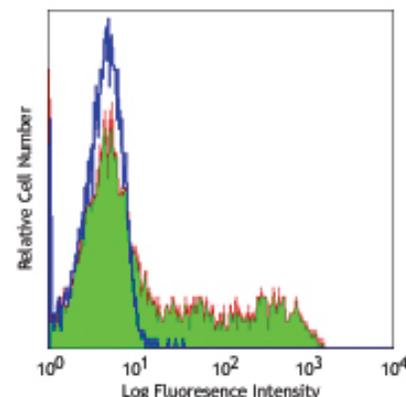
Reactivity: Human, **Cross-Reactivity:** Chimpanzee, Common Marmoset

Preparation: The antibody was purified by affinity chromatography.

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.



Human peripheral blood lymphocytes stained with purified UCHL1, followed by anti-mouse IgGs FITC

Applications:

Applications: FC - *Quality tested*
 WB, IP, IHC - *Reported in literature*

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 ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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

Product	Clone	Application
Purified anti-human CD45RA	HI100	FC, IHC, CyTOF®
Purified anti-human CD45	HI30	FC, IHC, WB, IF, CyTOF®
APC Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
Biotin Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC, ELISA, IHC, IF, WB
FITC Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
HRP Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	ELISA, IHC, WB
Purified Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, ICC, IF, IHC, IP, WB
PE Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Purified anti-human CD45RB	MEM-55	FC, IHC, IP, WB



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