103

10 Log Fluoresence Intensity

Human peripheral blood lymphocytes stained with biotinylated UCHL1,

followed by Sav-PE

104



Product Data Sheet

Relative Cell Number

100

Biotin anti-human CD45RO

Catalog # / Size: 304219 / 25 µg

304220 / 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

biotin under optimal conditions. The solution is free of unconjugated biotin.

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. Do not freeze.

Applications:

Applications: FC - Quality tested IHC, IP, WB - Reported in the 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 ≤0.5 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 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 Clone Biotin Mouse IgG2a, κ Isotype Ctrl

APC Streptavidin APC/Cy7 Streptavidin HRP Streptavidin PE Streptavidin PE/Cy5 Streptavidin PE/Cy7 Streptavidin

Cell Staining Buffer Human TruŠtain FcX™ (Fc Receptor Blocking Solution)

Application MOPC-173 FC, ICFC FC, ICFC FC, ICFC

ELISA, ELISPOT, IHC, WB FC, ICFC FC, ICFC FC, ICFC FC, ICC, ICFC FC, ICC, ICFC





