SONY

Product Data Sheet

PE anti-human CD45RO

Catalog # / Size: 2121220 / 100 µg
2121025 / 25 tests
2121030 / 100 tests

Clone: UCHL1

Isotype: Mouse IgG2a, κ

Immunogen: IL-2 dependent T cell line, CA1

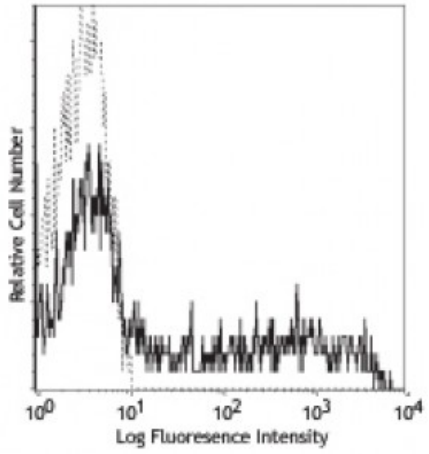
Reactivity: Human

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

Formulation: microg size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
test sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: IV N31

Concentration: microg sizes: 0.2 mg/ml
test sizes: lot-specific



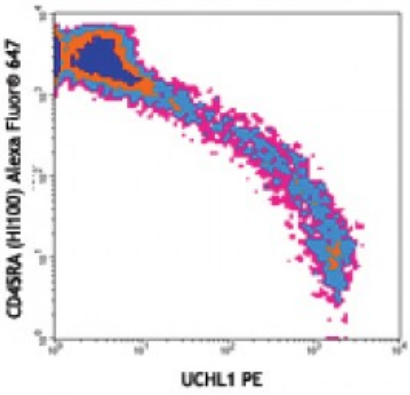
Human peripheral blood lymphocytes stained with UCHL1 PE

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining using the microg size, the suggested use of this reagent is ≤0.2 microg per million cells in 100 microL volume. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. 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



Human peripheral blood lymphocytes stained with UCHL1 PE and CD45RA (HI100) Alexa Fluor® 647

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)
13. Smith SH, *et al.* 1986. *Immunology* 58:63. (Immunogen)

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.