

TECHNICAL DATA SHEET

APC Anti-Human CD45RO (UCHL1)

Catalog Number: 20-0457

PRODUCT INFORMATION

Contents: APC Anti-Human CD45RO (UCHL1)

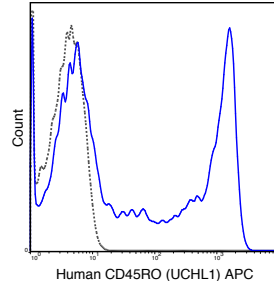
Isotype: Mouse IgG2a, kappa

Concentration: 5 uL (0.25 ug)/test

Clone: UCHL1

Reactivity: Human

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃,
0.1% gelatin, pH7.2



Human peripheral blood lymphocytes were stained with 5 uL (0.25 ug) APC Anti-Human CD45RO (20-0457) (solid line) or 0.25 ug APC Mouse IgG2a isotype control.

DESCRIPTION

The UCHL1 antibody reacts with the human CD45 isoform known as CD45RO, a protein tyrosine phosphatase of 220 kDa. CD45 is one of the most abundant hematopoietic markers, and is expressed on all leukocytes (the Leukocyte Common Antigen, LCA). Various isoforms are generated and expressed in cell-specific patterns. With their broad cell distribution, CD45 isoforms are critical for many leukocyte functions, regulating signal transduction and cell activation associated with the T cell receptor, B cell receptor, and IL-2 receptor. Other forms of CD45, with restricted cellular expression, include CD45R (B220), CD45RA, CD45RB, and others. The UCHL1 antibody is widely used as a marker for human CD45RO expression on thymocytes, activated memory T cells, monocytes, macrophages and granulocytes. The antibody is reported to be cross-reactive for Chimpanzee CD45RO.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10⁵ to 1x10⁸ cells.

REFERENCES

Imanguli MM, Swaim WD, League SC, Gress RE, Pavletic SZ, and Hakim FT. 2009. *Blood*. 113: 3620-3630. (immunohistochemistry - paraffin embedded tissue). Di Carlo E, D'Antuono T, Pompa P, Giuliani R, Rosini S, Stuppia L, Musiani P, and Sorrentino C. 2009. *Clin. Cancer Res.* 15: 2979-2987. (immunohistochemistry - paraffin embedded tissue). Kap YS, van Meurs M, van Driel N, Koopman G, Melief M-J, Brok HPM, Laman JD, and Hart BA. 2009. *J. Histochemistry & Cytochemistry*. 57: 1159-1167. (immunohistochemistry - Chimpanzee frozen tissue). Bonzheim I, Geissinger E, Tinguely M, Roth S, Grieb T, Reimer P, Wilhelm M, Rosenwald A, Muller-Hermelink HK, and Rudiger T. 2008. *Am. J. Clin. Pathol.* 130: 613-619. (immunofluorescence microscopy - frozen tissue). Kim M-H, Suh H-S, Si Q, Terman BE, and Lee SC. 2006. *J. Virol.* 80: 62-72. (western blot). Cappione AJ, Pugh-Bernard AE, Anolik JH, and Sanz I. 2004. *J. Immunol.* 172: 4298-4307. (immunoprecipitation). Gougeon ML, Lecoeur H, Boudet F, Ledru E, Marzabal S, Boullier S, Roue R, Nagata S, and Heeney J. 1997. *J. Immunol.* 158: 2964-2976. (flow cytometry - Chimpanzee). Kulas DT, Freund GG, and Mooney RA. 1996. *J. Biol. Chem.* 271: 755-760. (immunoprecipitation, western blot).