

## Anti-Human CD45RO Antibody, Clone UCHL1, FITC



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## Antibodies

Mouse monoclonal IgG2a antibody  
against human, chimpanzee, common  
marmoset CD45RO, FITC-conjugated

Catalog #60097FI  
#60097FI.1

100 tests 5 µL/test  
25 tests 5 µL/test

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

## Product Description

The UCHL1 antibody reacts with an extracellular epitope on CD45RO, the shortest isoform of CD45, a type I transmembrane glycoprotein and member of the protein tyrosine phosphatase family (receptor class 1/6 subfamily). Alternative splicing of exons 4, 5 and 6 that encode the extracellular RA, RB and RC polypeptides of CD45 gives rise to up to 8 isoforms with molecular masses of 180 - 240 kDa. Excision of all three exons generates the ~180-kDa CD45RO isoform, which is expressed on activated and memory (but not naïve) T cells, some B cell subsets, activated monocytes and macrophages, and granulocytes. CD45RO enhances both T cell receptor- and B cell receptor-mediated activation and is a known ligand for CD22 on B cells. The UCHL1 antibody has been employed to identify T-cell lymphomas and leukemia and is commonly used in combination with antibodies against CD45RA to discern memory and naïve T cells. The proportion of CD45RO+ (memory) T cells typically increases with age. The UCHL1 epitope is destroyed by treatment with neuraminidase or O-glycosidase.

Target Antigen Name:	CD45RO
Alternative Names:	B220, CD45, GP180, LCA, L-CA, LY5, T200, Protein tyrosine phosphatase receptor type C, PTPRC
Gene ID:	5788
Species Reactivity:	Human, Chimpanzee, Common Marmoset; reportedly cross-reacts to varying extents with Cow, Dog, Mouse, Rat, some macaques (Pig-tailed, Rhesus)
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	UCHL1
Isotype:	IgG2a, kappa
Immunogen:	Human IL-2-dependent T-cell line CA1
Conjugate:	FITC

## Applications

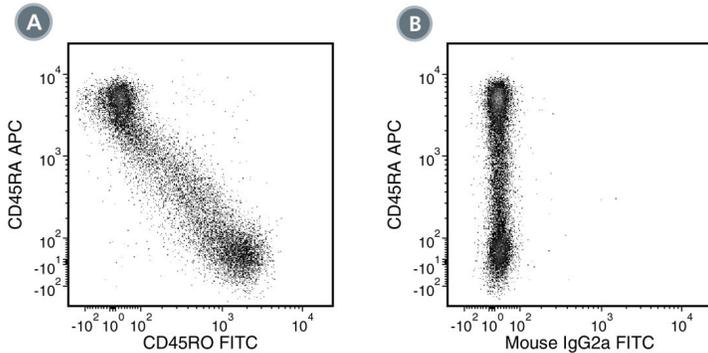
Verified:	FC
Reported:	FC, ICC, IF
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human Memory CD4+ T Cell Enrichment Kit (Catalog #19157) and EasySep™ Human Memory CD8+ T Cell Enrichment Kit (Catalog #19159).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

## Properties

Formulation:	Aqueous buffer containing 0.09% sodium azide, may contain carrier protein/stabilizer
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 5 µL per 1 × 10 <sup>6</sup> cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



(A) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs; gated on CD3<sup>+</sup> cells) labeled with Anti-Human CD45RO Antibody, Clone UCHL1, FITC and an anti-human CD45RA antibody, APC.

(B) Flow cytometry analysis of human PBMCs (gated on CD3<sup>+</sup> cells) labeled with a mouse IgG2a, kappa FITC isotype control antibody and an anti-human CD45RA antibody, APC.

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

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