

## Datasheet: MCA461C

**BATCH NUMBER 165218**

<b>Description:</b>	MOUSE ANTI HUMAN CD45RO:RPE-Cy5
<b>Specificity:</b>	CD45RO
<b>Format:</b>	RPE-CY5
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	UCHL1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/0.5ml

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

**Target Species** Human

**Species Cross Reactivity** Reacts with: Chimpanzee, Marmoset  
**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

**Product Form** Purified IgG conjugated to RPE-Cy5 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE-Cy5 488nm laser	496	667

**Preparation** Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

**Buffer Solution** Phosphate buffered saline

<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	0.2% Bovine Serum Albumin
<b>Immunogen</b>	Human IL-2 dependent T cells
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08575</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">5788</a>   PTPRC   <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD45
<b>RRID</b>	AB_321435
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse P3/NS1/1-Ag4-1 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human CD45RO monoclonal antibody, clone UCHL1</b> recognizes the low molecular weight isoform (180 kDa) of the leucocyte common antigen (LCA). The antigen is expressed by a functional subset of T cells with memory phenotype.</p> <p>In peripheral blood Mouse anti Human CD45RO, clone UCHL1 stains 40-80% of lymphocytes and all monocytes and granulocytes.</p>
<b>Flow Cytometry</b>	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>Norton, A.J. <i>et al.</i> (1986) Monoclonal antibody (UCHL1) that recognises normal and neoplastic T cells in routinely fixed tissues. <a href="#">J Clin Pathol. 39 (4): 399-405.</a></li> <li>Terry, L.A. <i>et al.</i> (1987) Phenotypic heterogeneity of the CD4+ and CD8+ subsets. Leucocyte Typing III. McMichael, A.J., Beverley, P.C.L. <i>et al.</i> eds. University Press. pp 225-7.</li> <li>Akbar, A.N. <i>et al.</i> (1988) Loss of CD45R and gain of UCHL1 reactivity is a feature of primed T cells. <a href="#">J Immunol. 140 (7): 2171-8.</a></li> <li>Beverley, P.C.L. <i>et al.</i> (1988) Phenotypic diversity of the CD45 antigen and its relation to function. <a href="#">Immunology, Suppl. 1: 3-5.</a></li> <li>Merkenschlager, M. <i>et al.</i> (1988) Limiting dilution analysis of proliferative responses in human lymphocyte populations defined by the monoclonal antibody UCHL1: implications for differential CD45 expression in T cell memory formation. <a href="#">Eur J Immunol. 18 (11): 1653-61.</a></li> <li>Terry, L.A. <i>et al.</i> (1988) The monoclonal antibody, UCHL1, recognizes a 180,000 MW component of the human leucocyte-common antigen, CD45. <a href="#">Immunology. 64 (2): 331-6.</a></li> <li>Cavers, M. <i>et al.</i> (2002) Differential expression of beta1 and beta2 integrins and L-selectin on CD4+ and CD8+ T lymphocytes in human blood: comparative analysis between isolated cells, whole blood samples and cryopreserved preparations. <a href="#">Clin Exp Immunol. 127: 60-5.</a></li> <li>Leigh, J.E. <i>et al.</i> (2006) Characterization of the immune status of CD8+ T cells in oral</li> </ol>

lesions of human immunodeficiency virus-infected persons with oropharyngeal Candidiasis. [Clin Vaccine Immunol. 13: 678-83.](#)

9. Nistala, K. *et al.* (2008) Interleukin-17-producing T cells are enriched in the joints of children with arthritis, but have a reciprocal relationship to regulatory T cell numbers. [Arthritis Rheum. 58: 875-87.](#)

10. Hutnick, N.A. *et al.* (2010) Vaccination with Ad5 vectors expands Ad5-specific CD8 T cells without altering memory phenotype or functionality. [PLoS One. 5: e14385.](#)

11. Liu Y *et al.* (2015) Fractionation of human spermatogenic cells using STA-PUT gravity sedimentation and their miRNA profiling. [Sci Rep. 5: 8084.](#)

12. Wilson, C.L. *et al.* (2015) Ubiquitin C-terminal hydrolase 1: A novel functional marker for liver myofibroblasts and a therapeutic target in chronic liver disease. [J Hepatol. 63 \(6\): 1421-8.](#)

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**Further Reading** 1. Beverley, P.C. (1987) Human T cell subsets. [Immunol Lett. 14 \(4\): 263-7.](#)

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**Storage** Store at +4°C.

DO NOT FREEZE

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.

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**Acknowledgements** Cy® and CyDye® are registered trademarks of GE Healthcare

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA461C>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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