

## Datasheet: MCA461F

<b>Description:</b>	MOUSE ANTI HUMAN CD45RO:FITC
<b>Specificity:</b>	CD45RO
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	UCHL1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.1 mg

## 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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

### Preparation

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

### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<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_321433
<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 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
<b>References</b>	<ol style="list-style-type: none"> <li>1. Smith, S.H. <i>et al.</i> (1986) Functional subsets of human helper-inducer cells defined by a new monoclonal antibody, UCHL1. <a href="#">Immunology 58: 63-70.</a></li> <li>2. 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>3. Beverley, P.C.L. <i>et al.</i> (1986) T-cell subsets and function. Progress in Immunology VI. Cinader, B., Miller, G.G., eds. Academic Press Orlando pp 941-948.</li> <li>4. Beverley, P.C. (1987) Human T cell subsets. <a href="#">Immunol Lett. 14 (4): 263-7.</a></li> <li>5. 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>6. 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>7. 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>8. 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>9. Merckenschlager, M. <i>et al.</i> (1988) Limiting dilution analysis of proliferative responses in</li> </ol>

human lymphocyte populations defined by the monoclonal antibody UCHL1: implications for differential CD45 expression in T cell memory formation. [Eur J Immunol. 18 \(11\): 1653-61.](#)

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11. 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.](#)

12. Leigh, J.E. *et al.* (2006) Characterization of the immune status of CD8+ T cells in oral lesions of human immunodeficiency virus-infected persons with oropharyngeal Candidiasis. [Clin Vaccine Immunol. 13: 678-83.](#)

13. 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.](#)

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

15. 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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**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:FITC \(MCA929F\)](#)

### Recommended Useful Reagents

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

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

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