

Datasheet: MCA461PE

Description:	MOUSE ANTI HUMAN CD45RO:RPE
Specificity:	CD45RO
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	UCHL1
Isotype:	IgG2a
Quantity:	100 TESTS

Product Details

RRID AB_321434

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species Human

Species Cross Reactivity Reacts with: Chimpanzee, Marmoset, Pig
N.B. Antibody reactivity and working conditions may vary between species.

Product Form Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilised

Reconstitution Reconstitute with 1.0 ml distilled water
 Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578

Preparation Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide (NaN₃)
Stabilisers 1% Bovine Serum Albumin
 5% Sucrose

Immunogen	Human IL-2 dependent T cells
External Database Links	<p>UniProt: P08575 Related reagents</p> <p>Entrez Gene: 5788 PTPRC Related reagents</p>
Synonyms	CD45
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse P3/NS1/1-Ag4-1 myeloma cell line
Specificity	<p>Mouse anti Human CD45RO monoclonal antibody, clone UCHL1 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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> Smith, S.H. <i>et al.</i> (1986) Functional subsets of human helper-inducer cells defined by a new monoclonal antibody, UCHL1. Immunology 58: 63-70. Norton, A.J. <i>et al.</i> (1986) Monoclonal antibody (UCHL1) that recognises normal and neoplastic T cells in routinely fixed tissues. J Clin Pathol. 39 (4): 399-405. 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. Beverley, P.C. (1987) Human T cell subsets. Immunol Lett. 14 (4): 263-7. 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. Akbar, A.N. <i>et al.</i> (1988) Loss of CD45R and gain of UCHL1 reactivity is a feature of primed T cells. J Immunol. 140 (7): 2171-8. 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. Immunology. 64 (2): 331-6. Beverley, P.C.L. <i>et al.</i> (1988) Phenotypic diversity of the CD45 antigen and its relation to function. Immunology, Suppl. 1: 3-5. 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. Eur J Immunol. 18 (11): 1653-61. 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. Clin Exp Immunol. 127: 60-5. Hutnick, N.A. <i>et al.</i> (2010) Vaccination with Ad5 vectors expands Ad5-specific CD8 T cells without altering memory phenotype or functionality. PLoS One. 5: e14385. Leigh, J.E. <i>et al.</i> (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. Nistala, K. <i>et al.</i> (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. Liu Y <i>et al.</i> (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.](#)

16. Zhao, H. *et al.* (2018) *In vitro* differentiation of spermatogonial stem cells using testicular cells from Guangxi Bama mini-pig. [J Vet Sci. 19 \(5\): 592-9.](#)

Storage

Prior to reconstitution store at +4°C. Following reconstitution 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.

Guarantee

12 months from date of reconstitution

Health And Safety Information

Material Safety Datasheet documentation #10075 available at:
10075: <https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

Recommended Useful Reagents

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

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

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