



Datasheet: MCA461SBY720

BATCH NUMBER 100007354

Description:	MOUSE ANTI HUMAN CD45RO:StarBright Yellow 720
Specificity:	CD45RO
Format:	StarBright Yellow 720
Product Type:	Monoclonal Antibody
Clone:	UCHL1
Isotype:	IgG2a
Quantity:	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.

	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
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 StarBright Yellow 720 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Yellow 720	548	719

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

Buffer Solution Phosphate buffered saline

Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
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 5ul of the suggested working dilution to label 10 ⁶ cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	<ol style="list-style-type: none"> 1. 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. 2. 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. 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. 4. Beverley, P.C. (1987) Human T cell subsets. Immunol Lett. 14 (4): 263-7. 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. 6. 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. 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. Immunology. 64 (2): 331-6. 8. 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. 9. Merckenschlager, 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.](#)

10. Cavers, M. *et al.* (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.](#)

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.](#)

Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA461SBY720 20471
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

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

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

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