Datasheet: MCA461SBV440

Description:	MOUSE ANTI HUMAN CD45RO:StarBright Violet 440
Specificity:	CD45RO
Format:	StarBright Violet 440
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 Violet 440 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 440	383	436

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN_3) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350
Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
Immunogen	Human IL-2 dependent T cells
External Database Links	**UniProt:** P08575 Related reagents **Entrez Gene:** 5788 PTPRC Related reagents
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	**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. In peripheral blood Mouse anti Human CD45RO, clone UCHL1 stains 40-80% of lymphocytes and all monocytes and granulocytes.
Flow Cytometry	Use 5µl of the suggested working dilution to label 10^6 cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	1. Norton, A.J. *et al.* (1986) Monoclonal antibody (UCHL1) that recognises normal and neoplastic T cells in routinely fixed tissues. J Clin Pathol. 39 (4): 399-405. 2. Terry. L.A. *et al*. (1987) Phenotypic heterogeneity of the CD4+ and CD8+ subsets. Leucocyte Typing III. McMichael, A.J., Beverley, P.C.L. *et al*. eds. University Press. pp 225-7. 3. Akbar, A.N. *et al.* (1988) Loss of CD45R and gain of UCHL1 reactivity is a feature of primed T cells. J Immunol. 140 (7): 2171-8. 4. Beverley, P.C.L. *et al*. (1988) Phenotypic diversity of the CD45 antigen and its relation to function. Immunology, Suppl. 1: 3-5. 5. Merkenschlager, M. *et al.* (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. 6. Terry, L.A. *et al.* (1988) The monoclonal antibody, UCHL1, recognizes a 180,000 MW component of the human leucocyte-common antigen, CD45. Immunology. 64 (2): 331-6. 7. 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.
8. 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.
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.

Further Reading	1. Beverley, P.C. (1987) Human T cell subsets. Immunol Lett. 14 (4): 263-7.
Storage	This product is shipped at ambient temperature. 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 #20438 available at: https://www.bio-rad-antibodies.com/SDS/MCA461SBV440
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M440796:250523'

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