

Datasheet: MCA461SBV440

# **BATCH NUMBER 100004130**

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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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	Reacts with: Chimpa	nzee, Marmoset, Pig			
Reactivity	N.B. Antibody reactive	rity and working conditi	ions may vary betw	een species. Cross	
	•	· ·	•	eviewed publications or	
	•	tions from the originate	ors. 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 (nn	n)	
	StarBright Violet 440	385	438		
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture				
	supernatant				

Preservative Stabilisers 0.09% Sodium Azide (NaN<sub>3</sub>)1% Bovine Serum Albumin

0.1% Pluronic F68 0.1% PEG 3350

**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 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

- 1. Smith, S.H. *et al.* (1986) Functional subsets of human helper-inducer cells defined by a new monoclonal antibody, UCHL1. <u>Immunology 58: 63-70.</u>
- 2. Norton, A.J. *et al.* (1986) Monoclonal antibody (UCHL1) that recognises normal and neoplastic T cells in routinely fixed tissues. <u>J Clin Pathol.</u> 39 (4): 399-405.
- 3. Beverley, P.C.L. *et al.* (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. *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.
- 6. Akbar, A.N. *et al.* (1988) Loss of CD45R and gain of UCHL1 reactivity is a feature of primed T cells. <u>J Immunol. 140 (7): 2171-8.</u>
- 7. Terry, L.A. *et al.* (1988) The monoclonal antibody, UCHL1, recognizes a 180,000 MW component of the human leucocyte-common antigen, CD45. <u>Immunology</u>. 64 (2): 331-6.
- 8. Beverley, P.C.L. *et al.* (1988) Phenotypic diversity of the CD45 antigen and its relation to function. <u>Immunology, Suppl. 1: 3-5.</u>
- 9. 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.

- 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. <u>Clin Exp Immunol.</u> 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. <u>Clin Vaccine Immunol.</u> 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. <u>Arthritis Rheum. 58: 875-87.</u>
- 14. Liu Y *et al.* (2015) Fractionation of human spermatogenic cells using STA-PUT gravity sedimentation and their miRNA profiling. <u>Sci Rep. 5: 8084.</u>
- 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. <u>J Hepatol. 63 (6):</u> 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	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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA461SBV440">https://www.bio-rad-antibodies.com/SDS/MCA461SBV440</a> 20438
Regulatory	For research purposes only

### Related Products

# **Recommended Useful Reagents**

Email: antibody sales us@bio-rad.com

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_uk@bio-rad.com

Email: antibody sales de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M374297:201028'

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