

Datasheet: MCA461SBV570

BATCH NUMBER 100005105

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| Description: | MOUSE ANTI HUMAN CD45RO:StarBright Violet 570 |
| Specificity: | CD45RO |
| Format: | StarBright Violet 570 |
| 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 570 - liquid

| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|-----------|-----------------------|---------------------|-------------------|
| | StarBright Violet 570 | 402 | 570 |

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

Buffer Solution Phosphate buffered saline

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|--------------------------------|---|
| 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"> 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. 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. 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. 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. 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.](#)

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.](#)

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| Further Reading | 1. Beverley, P.C. (1987) Human T cell subsets. Immunol Lett. 14 (4): 263-7. |
| 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/MCA461SBV570 20471 |
| Regulatory | For research purposes only |

Related Products

Recommended Useful Reagents

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

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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