

Datasheet: MCA461GA

BATCH NUMBER 1711

Description:	MOUSE ANTI HUMAN CD45RO
Specificity:	CD45RO
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	UCHL1
Isotype:	IgG2a
Quantity:	0.1 mg

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	▪			1/25 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Chimpanzee, Marmoset, Pig</p> <p>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.</p>
Product Form	Purified IgG - liquid
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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1 mg/ml
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
RRID	AB_324651
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.
Immunohistology	This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.
Histology Positive Control Tissue	Tonsil
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. *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. [J Immunol. 140 \(7\): 2171-8.](#)
7. 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.](#)
8. Beverley, P.C.L. *et al.* (1988) Phenotypic diversity of the CD45 antigen and its relation to function. [Immunology, Suppl. 1: 3-5.](#)
9. Merckenschlager, 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. [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.](#)
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	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	<p>Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA461GA</p>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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
'M367721:200529'

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