

Datasheet: MCA1267SBB675

BATCH NUMBER 100006924

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| Description: | MOUSE ANTI HUMAN CD4:StarBright Blue 675 |
| Specificity: | CD4 |
| Format: | StarBright Blue 675 |
| Product Type: | Monoclonal Antibody |
| Clone: | RPA-T4 |
| Isotype: | IgG1 |
| 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.

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|------------------------|---|----------------------------|--------------------------|
| Target Species | Human | | |
| Product Form | Purified IgG conjugated to StarBright Blue 675 - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | StarBright Blue 675 | 476 | 675 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G 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 PHA blasts |
| External Database Links | <p>UniProt: P01730 Related reagents</p> <p>Entrez Gene: 920 CD4 Related reagents</p> |
| Fusion Partners | Spleen cells from immunized BALB/c mice were fused with cells of the mouse NSI myeloma cell line |
| Specificity | <p>Mouse anti human CD4 antibody, clone RPA-T4 recognizes human CD4, a ~55 kDa cell surface glycoprotein, primarily expressed on a subpopulation of T lymphocytes, on peripheral blood monocytes and on tissue macrophages. Epitope mapping shows that antibodies, produced by clone RPA-T4, recognize an epitope within domain 1 of the extracellular region of the CD4 molecule.</p> <p>Mouse anti human CD4 antibody, clone RPA-T4 blocks gp120-CD4 interaction and inhibits syncytium formation (Piatier-Tonneau <i>et al</i>, 1997). The use of Mouse anti Human CD4:Low Endotoxin (MCA1267EL) is recommended for functional assays.</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. Zarkesh-Esfahani, H. <i>et al.</i> (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. J Immunol. 167 (8): 4593-9. 2. Voehringer, D. <i>et al.</i> (2002) Lack of proliferative capacity of human effector and memory T cells expressing killer cell lectinlike receptor G1 (KLRG1). Blood. 100 (10): 3698-702. 3. Piatier-Tonneau, D. (1997) CD4 workshop panel report. In: Leucocyte Typing VI: White Cell Differentiation Antigens: Proceedings of the Sixth International Workshop and Conference Held in Kobe, Japan, 10-14 November 1996. Garland Pub., 1998. 4. Pentón-Rol, G. <i>et al.</i> (2011) C-Phycocyanin ameliorates experimental autoimmune encephalomyelitis and induces regulatory T cells. Int Immunopharmacol. 11 (1): 29-38. 5. Wright, G.J. <i>et al.</i> (2001) The unusual distribution of the neuronal/lymphoid cell surface CD200 (OX2) glycoprotein is conserved in humans. Immunology. 102 (2): 173-9. 6. Zhang, Y. <i>et al.</i> (2013) Accelerated <i>in vivo</i>. proliferation of memory phenotype CD4⁺ T-cells in human HIV-1 infection irrespective of viral chemokine co-receptor tropism. PLoS Pathog. 9 (4): e1003310. 7. Bughani, U. <i>et al.</i> (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. PLoS One. 12 (7): e0180088. |
| 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/MCA1267SBB675>
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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