

## Datasheet: MCA500SBUV540

|                      |                                               |
|----------------------|-----------------------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE CD3:StarBright UltraViolet 540 |
| <b>Specificity:</b>  | CD3                                           |
| <b>Format:</b>       | StarBright UltraViolet 540                    |
| <b>Product Type:</b> | Monoclonal Antibody                           |
| <b>Clone:</b>        | KT3                                           |
| <b>Isotype:</b>      | IgG2a                                         |
| <b>Quantity:</b>     | 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](http://www.bio-rad-antibodies.com/protocols).

|                    | Yes | No | Not Determined | Suggested Dilution |
|--------------------|-----|----|----------------|--------------------|
| Flow Cytometry (1) | ▪   |    |                | 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.

**(1) Staining at lower temperatures generally requires longer incubation to reach antibody binding equilibrium, and this effect is more pronounced for StarBright Dyes due to their larger size. For optimum staining, Bio-Rad recommends incubating samples either overnight at 4°C or 1 hour at room temperature.**

|                                 |                                                                                               |                            |                          |
|---------------------------------|-----------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| <b>Target Species</b>           | Mouse                                                                                         |                            |                          |
| <b>Product Form</b>             | Purified IgG conjugated to StarBright UltraViolet 540 - liquid                                |                            |                          |
| <b>Max Ex/Em</b>                | <b>Fluorophore</b>                                                                            | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                 | StarBright UltraViolet 540                                                                    | 338                        | 540                      |
| <b>Preparation</b>              | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |                            |                          |
| <b>Buffer Solution</b>          | Phosphate buffered saline                                                                     |                            |                          |
| <b>Preservative Stabilisers</b> | 0.09% Sodium Azide (NaN <sub>3</sub> )                                                        |                            |                          |

1% Bovine Serum Albumin  
0.1% Pluronic F68  
0.1% PEG 3350  
0.05% Tween 20

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|                                       |                                                                                                                           |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Approx. Protein Concentrations</b> | For information on the concentration of our StarBright Dye conjugated reagents please visit our <a href="#">FAQ</a> page. |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------|

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|------------------|------------------|
| <b>Immunogen</b> | CBAT6 thymocytes |
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**External Database Links**

**UniProt:**

|                        |                                  |
|------------------------|----------------------------------|
| <a href="#">P22646</a> | <a href="#">Related reagents</a> |
| <a href="#">P24161</a> | <a href="#">Related reagents</a> |
| <a href="#">P11942</a> | <a href="#">Related reagents</a> |
| <a href="#">P29020</a> | <a href="#">Related reagents</a> |
| <a href="#">P04235</a> | <a href="#">Related reagents</a> |

**Entrez Gene:**

|                       |       |                                  |
|-----------------------|-------|----------------------------------|
| <a href="#">12501</a> | Cd3e  | <a href="#">Related reagents</a> |
| <a href="#">12503</a> | Cd247 | <a href="#">Related reagents</a> |
| <a href="#">12500</a> | Cd3d  | <a href="#">Related reagents</a> |
| <a href="#">12502</a> | Cd3g  | <a href="#">Related reagents</a> |
| <a href="#">12503</a> | Cd247 | <a href="#">Related reagents</a> |

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|                 |                 |
|-----------------|-----------------|
| <b>Synonyms</b> | Cd3z, T3d, Tcrz |
|-----------------|-----------------|

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| <b>Fusion Partners</b> | Spleen cells from immunized SD rats were fused with cells of the NS0 mouse myeloma cell line. |
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|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specificity</b> | <b>Rat anti Mouse CD3 antibody, clone KT3</b> recognizes the mouse CD3 antigen, expressed by mature T cells. Rat anti Mouse CD3 antibody, clone KT3 may be used to trigger proliferation and cytotoxicity of CD3 positive cells ( <a href="#">Tomonari 1988</a> ). |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NB. For optimal staining incubations should be performed at room temperature.

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|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flow Cytometry</b> | Use 5µl of the suggested working dilution to label 0.5x10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application. |
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|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage</b>                       | Store at +4°C. DO NOT FREEZE.<br>This product should be stored undiluted.                                                                                                            |
| <b>Guarantee</b>                     | 12 months from date of despatch                                                                                                                                                      |
| <b>Acknowledgements</b>              | This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts                                                                                      |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA500SBUV540">https://www.bio-rad-antibodies.com/SDS/MCA500SBUV540</a> |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                           |

## Related Products

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://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](http://bio-rad-antibodies.com/datasheets)  
'M452479:260710'

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