

## Datasheet: MCA2806SBV440

|                      |   |
|----------------------|---|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD69:StarBright Violet 440 |
| <b>Specificity:</b>  | CD69  |
| <b>Other names:</b>  | AIM   |
| <b>Format:</b>       | StarBright Violet 440                       |
| <b>Product Type:</b> | Monoclonal Antibody                         |
| <b>Clone:</b>        | FN50  |
| <b>Isotype:</b>      | IgG1  |
| <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 | ▪   |    |                | 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: Baboon, Chimpanzee, Cynomolgus monkey, Rhesus Monkey, Macaque  
**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 440 - liquid

#### Max Ex/Em

| Fluorophore           | Excitation Max (nm) | Emission Max (nm) |
|-----------------------|---------------------|-------------------|
| StarBright Violet 440 | 383                 | 436               |

#### Preparation

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

#### Buffer Solution

Phosphate buffered saline

|                                       |   |
|---------------------------------------|---|
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide (NaN <sub>3</sub> )<br>1% Bovine Serum Albumin<br>0.1% Pluronic F68<br>0.1% PEG 3350   |
| <b>Approx. Protein Concentrations</b> | For information on the concentration of our StarBright Dye conjugated reagents please visit our <a href="#">FAQ</a> page.   |
| <b>Immunogen</b>                      | Activated human B-cells.  |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/><a href="#">Q07108</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/><a href="#">969</a>    CD69    <a href="#">Related reagents</a></p>  |
| <b>Synonyms</b>                       | CLEC2C  |
| <b>Specificity</b>                    | <p><b>Mouse anti Human CD69 antibody, clone FN50</b> recognizes the human early activation antigen CD69, also known as activation inducer molecule (AIM), Early T-cell activation antigen p60, EA1 or MLR-3. CD69 is a 199 amino acid single pass type II transmembrane glycoprotein of ~30 kDa containing a single <a href="#">C-type lectin domain</a> and a single potential <a href="#">N-glycosylation site</a>. CD69 is expressed as a disulphide bond linked homodimer of ~60 kDa (<a href="#">López-Cabrera et al. 1993</a>).</p> <p>CD69 is a marker of early activation expressed by B and T lymphocytes, natural killer cells(<a href="#">Werfel 1997</a>), neutrophils, thymocytes and platelets (<a href="#">Gaviol et al. 1992</a>). Expression of CD69 is rapidly induced on activation by infection or chronic inflammation (<a href="#">Sancho et al. 2005</a>). Multiple dimeric glycoforms of CD69 can be formed through differential glycosylation of the monomeric subunits (<a href="#">Vance et al. 1997</a>).</p> <p>Mouse anti Human CD69 , clone FN50 is useful for the detection of CD69 by flow cytometry and immunohistochemistry on frozen tissue sections.</p> |
| <b>Flow Cytometry</b>                 | Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.   |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>Holte, H. <i>et al.</i> (1989) Ki67 and 4F2 antigen expression as well as DNA synthesis predict survival at relapse/tumour progression in low-grade B-cell lymphoma. <a href="#">Int J Cancer. 44 (6): 975-80.</a></li> <li>Herberth, M. <i>et al.</i> (2010) Differential effects on T-cell function following exposure to serum from schizophrenia smokers. <a href="#">Mol Psychiatry. 15 (4): 364-71.</a></li> <li>Schaeuble, K. <i>et al.</i> (2011) Cross-talk between TCR and CCR7 signaling sets a temporal threshold for enhanced T lymphocyte migration. <a href="#">J Immunol. 187 (11): 5645-52.</a></li> <li>Sela, M. <i>et al.</i> (2011) Sequential phosphorylation of SLP-76 at tyrosine 173 is required for activation of T and mast cells. <a href="#">EMBO J. 30 (15): 3160-72.</a></li> <li>Garbe, Y. <i>et al.</i> (2011) Semiallogenic fusions of MSI(+) tumor cells and activated B cells</li> </ol>  |

- induce MSI-specific T cell responses. [BMC Cancer. 11: 410.](#)
6. Schwitalle, Y. *et al.* (2004) Immunogenic peptides generated by frameshift mutations in DNA mismatch repair-deficient cancer cells. [Cancer Immun. 4: 14.](#)
7. Sutavani, R.V. *et al.* (2013) CD55 Costimulation Induces Differentiation of a Discrete T Regulatory Type 1 Cell Population with a Stable Phenotype. [J Immunol. 191: 5895-903.](#)
8. Walter, G.J. *et al.* (2013) Interaction with activated monocytes enhances cytokine expression and suppressive activity of human CD4+CD45ro+CD25+CD127(low) regulatory T cells. [Arthritis Rheum. 65: 627-38.](#)
9. Kuric, E. *et al.* (2017) Demonstration of Tissue Resident Memory CD8 T Cells in Insulinitic Lesions in Adult Patients with Recent-Onset Type 1 Diabetes. [Am J Pathol. 187 \(3\): 581-8.](#)
10. Karnell, F.G. *et al.* (2017) Reconstitution of immune cell populations in multiple sclerosis patients after autologous stem cell transplantation. [Clin Exp Immunol. 189 \(3\): 268-278.](#)
11. Rossatti, P. *et al.* (2022) Rapid increase in transferrin receptor recycling promotes adhesion during T cell activation. [BMC Biol. 20 \(1\): 189.](#)

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**Storage**

Store at +4°C. DO NOT FREEZE.  
This product should be stored undiluted.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts

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**Health And Safety Information**

Material Safety Datasheet documentation #20438 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2806SBV440>  
20438

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

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

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto: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](https://www.bio-rad-antibodies.com/datasheets)

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