

Datasheet: MCA2806SBUV445

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| Description: | MOUSE ANTI HUMAN CD69:StarBright UltraViolet 445 |
| Specificity: | CD69 |
| Other names: | AIM |
| Format: | StarBright UltraViolet 445 |
| Product Type: | Monoclonal Antibody |
| Clone: | FN50 |
| 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.

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 UltraViolet 445 - liquid

Max Ex/Em

| Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|----------------------------|---------------------|-------------------|
| StarBright UltraViolet 445 | 347 | 440 |

Preparation

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

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|--------------------------------|---|
| 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 | Activated human B-cells. |
| External Database Links | <p>UniProt: Q07108 Related reagents</p> <p>Entrez Gene: 969 CD69 Related reagents</p> |
| Synonyms | CLEC2C |
| Specificity | <p>Mouse anti Human CD69 antibody, clone FN50 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 C-type lectin domain and a single potential N-glycosylation site. CD69 is expressed as a disulphide bond linked homodimer of ~60 kDa (López-Cabrera et al. 1993).</p> <p>CD69 is a marker of early activation expressed by B and T lymphocytes, natural killer cells(Werfel 1997), neutrophils, thymocytes and platelets (Gaviol et al. 1992). Expression of CD69 is rapidly induced on activation by infection or chronic inflammation (Sancho et al. 2005). Multiple dimeric glycoforms of CD69 can be formed through differential glycosylation of the monomeric subunits (Vance et al. 1997).</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> |
| 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"> 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. Int J Cancer. 44 (6): 975-80. Herberth, M. <i>et al.</i> (2010) Differential effects on T-cell function following exposure to serum from schizophrenia smokers. Mol Psychiatry. 15 (4): 364-71. Schaeuble, K. <i>et al.</i> (2011) Cross-talk between TCR and CCR7 signaling sets a temporal threshold for enhanced T lymphocyte migration. J Immunol. 187 (11): 5645-52. Sela, M. <i>et al.</i> (2011) Sequential phosphorylation of SLP-76 at tyrosine 173 is required for activation of T and mast cells. EMBO J. 30 (15): 3160-72. Garbe, Y. <i>et al.</i> (2011) Semiallogenic fusions of MSI(+) tumor cells and activated B cells |

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6. Schwitalle, Y. *et al.* (2004) Immunogenic peptides generated by frameshift mutations in DNA mismatch repair-deficient cancer cells. [Cancer Immun. 4: 14.](#)
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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.](#)
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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. |
| 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/MCA2806SBUV445 20471 |
| Regulatory | For research purposes only |

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

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: 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

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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