

Datasheet: MCA2806SBUV445

BATCH NUMBER 100006487

| | |
|----------------------|--|
| 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

| | |
|---------------------------------|---|
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20 |
| Immunogen | Activated human B-cells. |
| External Database Links | UniProt: Q07108 Related reagents Entrez Gene: 969 CD69 Related reagents |
| 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 <i>et al.</i> 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 <i>et al.</i> 1992). Expression of CD69 is rapidly induced on activation by infection or chronic inflammation (Sancho <i>et al.</i> 2005). Multiple dimeric glycoforms of CD69 can be formed through differential glycosylation of the monomeric subunits (Vance <i>et al.</i> 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 |

- 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.](#)

| | |
|--------------------------------------|---|
| 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 America | Tel: +1 800 265 7376 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
'M395187:220321'

Printed on 08 Mar 2024