

## Datasheet: MCA2806C

<b>Description:</b>	MOUSE ANTI HUMAN CD69:RPE-Cy5
<b>Specificity:</b>	CD69
<b>Other names:</b>	AIM
<b>Format:</b>	RPE-CY5
<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 antibody 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 antibody 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 R. Phycoerythrin - Cy5 (RPE-Cy5) - liquid

### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE-Cy5 488nm laser	496	667

### Preparation

Purified IgG prepared by affinity chromatography from tissue culture supernatant

### Buffer Solution

Phosphate buffered saline

<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	0.2% Bovine Serum Albumin
<b>Immunogen</b>	Activated human B-cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q07108</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">969</a>    CD69    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CLEC2C
<b>RRID</b>	AB_1102293
<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 5ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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>2. 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>3. 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>4. 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>5. Garbe, Y. <i>et al.</i> (2011) Semiallogenic fusions of MSI(+) tumor cells and activated B cells induce MSI-specific T cell responses. <a href="#">BMC Cancer. 11: 410.</a></li> <li>6. Schwitalle, Y. <i>et al.</i> (2004) Immunogenic peptides generated by frameshift mutations in DNA mismatch repair-deficient cancer cells. <a href="#">Cancer Immun. 4: 14.</a></li> <li>7. Sutavani, R.V. <i>et al.</i> (2013) CD55 Costimulation Induces Differentiation of a Discrete T</li> </ol>

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 Insulitic 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.](#)

<b>Storage</b>	<p>Store at +4°C.</p> <p>DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
<b>Acknowledgements</b>	Cy® and CyDye® are registered trademarks of GE Healthcare
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2806C">https://www.bio-rad-antibodies.com/SDS/MCA2806C</a></p> <p>10041</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)  
[HUMAN SEROBLOCK \(BUF070B\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M410398:221028'

Printed on 12 Dec 2024