## Datasheet: MCA2806C BATCH NUMBER 270712

Description:	MOUSE ANTI HUMAN CD69:RPE-Cy5		
Specificity:	CD69		
Other names:	AIM		
Format:	RPE-CY5		
Product Type:	Monoclonal Antibody		
Clone:	FN50		
Isotype:	lgG1		
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 <u>www.bio-rad-antibodies.com/protocols</u> .				
		Yes No	Not Determined	Suggested Dilution	
	Flow Cytometry	•		Neat	
	Where this antibody ha necessarily exclude its a guide only. It is recom system using appropria	use in such procedu nmended that the use	res. Suggested working er titrates the antibody	g dilutions are given as	
Target Species	Human				
Species Cross Reactivity	Reacts with: Baboon, Chimpanzee, Cynomolgus monkey, Rhesus Monkey, Macaque <b>N.B.</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 RPE-Cy5 488nm laser	Excitation Max (nm) 496	Emission Max (nm) 667		
Preparation	Purified IgG prepared by affinity chromatography				
Buffer Solution	Phosphate buffered saline				

Preservative Stabilisers	0.09% Sodium Azide 0.2% Bovine Serum Albumin
Immunogen	Activated human B-cells.
External Database Links	UniProt: <u>Q07108</u> <u>Related reagents</u>
	Entrez Gene: 969 CD69 <u>Related reagents</u>
Synonyms	CLEC2C
RRID	AB_1102293
Specificity	<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 <u>C-type lectin domain</u> and a single potential <u>N-glycosylation site</u> . CD69 is expressed as a disulphide bond linked homodimer of ~60 kDa ( <u>López-Cabrera <i>et al.</i> 1993</u> ).
	CD69 is a marker of early activation expressed by B and T lymphocytes, natural killer cells( <u>Werfel 1997</u> ), neutrophils, thymocytes and platelets ( <u>Gaviol <i>et al.</i> 1992</u> ). Expression of CD69 is rapidly induced on activation by infection or chronic inflamation ( <u>Sancho <i>et al.</i></u> 2005). Multiple dimeric glycoforms of CD69 can be formed through differential glycosylation of the monomeric subunits ( <u>Vance <i>et al.</i> 1997</u> ).
	Mouse anti Human CD69 , clone FN50 is useful for the detection of CD69 by flow cytometry and immunohistochemistry on frozen tissue sections.
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
References	<ol> <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. <u>Int J Cancer.</u> <u>44 (6): 975-80.</u></li> <li>Herberth, M. <i>et al.</i> (2010) Differential effects on T-cell function following exposure to serum from schizophrenia smokers. <u>Mol Psychiatry. 15 (4): 364-71.</u></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. <u>J Immunol. 187 (11): 5645-52.</u></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. <u>EMBO J. 30 (15): 3160-72.</u></li> <li>Garbe, Y. <i>et al.</i> (2011) Semiallogenic fusions of MSI(+) tumor cells and activated B cells induce MSI-specific T cell responses. <u>BMC Cancer. 11: 410.</u></li> <li>Schwitalle, Y. <i>et al.</i> (2004) Immunogenic peptides generated by frameshift mutations in DNA mismatch repair-deficient cancer cells. <u>Cancer Immun. 4: 14.</u></li> <li>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. <u>J Immunol. 191: 5895-903.</u>			
	8. Walter, G.J. <i>et al.</i> (2013) Interaction with activated monocytes enhances cytokine expression and suppressive activity of human CD4+CD45ro+CD25+CD127(low)			
	regulatory T cells. <u>Arthritis Rheum. 65: 627-38.</u>			
	9. Kuric, E. <i>et al.</i> (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			
(	<u>(3): 581-8.</u>			
	10. Karnell, F.G. <i>et al.</i> (2017) Reconstitution of immune cell pop	oulations in multiple		
S	sclerosis patients after autologous stem cell transplantation. <u>Cl</u>	<u>in Exp Immunol. 189 (3):</u>		
	<u>268-278.</u>			
Storage	Store at +4°C.			
I	DO NOT FREEZE.			
ţ	This product should be stored undiluted. This product is photos protected from light. Should this product contain a precipitate w microcentrifugation before use.			
Guarantee	6 months from date of despatch			
Acknowledgements (	Cy ${ m I\!R}$ and CyDye ${ m I\!R}$ are registered trademarks of GE Healthcare			
Health And Safety	Material Safety Datasheet documentation #10041 available at:			
Information	https://www.bio-rad-antibodies.com/SDS/MCA2806C			
	10041			
Regulatory	For research purposes only			

### **Related Products**

### **Recommended Useful Reagents**

#### HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376 Fax: +1 919 878 3751 America Email: antibody\_sales\_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700 Europe Fax: +44 (0)1865 852 739 Email: antibody\_sales\_uk@bio-rad.com

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 'M344777:190118'

#### Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint