Datasheet: MCA2806C BATCH NUMBER 166804

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 N	o 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 RPE-Cy5 488nm laser	Excitation Max 496	nm) Emission Max (nm) 667	-		
Preparation	Purified IgG prepared by affinity chromatography from tissue culture supernatant					
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	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 <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 ⁶ cells or 100ul whole blood
References	 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> 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> 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> 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> 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> 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> Sutavani, R.V. <i>et al.</i> (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. <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. Arthritis Rheum. 65: 627-38. 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 (3): 581-8. 10. Karnell, F.G. <i>et al.</i> (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. <i>et al.</i> (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. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
Acknowledgements	Cy® and CyDye® are registered trademarks of GE Healthcare
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2806C 10041
Regulatory	For research purposes only
Related Produc	rts

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-	-rad.com	Email: antibody_sales_uk@bio-	rad.com	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 'M410398:221028'

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