

# Datasheet: MCA2806SBR670

Description:	MOUSE ANTI HUMAN CD69:StarBright Red 670			
Specificity:	CD69			
Other names:	AIM			
Format:	StarBright Red 670			
Product Type:	Monoclonal Antibody			
Clone:	FN50			
lsotype:	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 No	t Determined	Suggested Dilution	
	Flow Cytometry	•			Neat	
	Where this product ha necessarily exclude its a guide only. It is reco system using appropri	s use in such p mmended that	rocedures. Su the user titrat	uggested workin tes the product f	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 StarBright Red 670 - liquid					
Max Ex/Em	Fluorophore	Excitation Ma	x (nm) Emiss	sion Max (nm)		
	StarBright Red 670	653		666		
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant					
Buffer Solution	Phosphate buffered sa	aline				

Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20		
Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our <u>FAQ</u> page.		
Immunogen	Activated human B-cells.		
External Database Links	UniProt:         Q07108       Related reagents         Entrez Gene:         969       CD69       Related reagents		
Synonyms	CLEC2C		
Specificity	<ul> <li>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 N-glycosylation site. CD69 is expressed as a disulphide bond linked homodimer of ~60 kDa (López-Cabrera <i>et al.</i> 1993).</li> <li>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 inflamation (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).</li> <li>Mouse anti Human CD69, clone FN50 is useful for the detection of CD69 by flow cytometry and immunohistochemistry on frozen tissue sections.</li> </ul>		
Flow Cytometry	Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.		
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> </ol>		

	5. 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</u> . 11: 410.
	<ul> <li>6. 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> </ul>
	<ol> <li>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.</li> <li>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></li> <li>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. <u>Am J Pathol. 187</u> (<u>3): 581-8.</u></li> <li>Karnell, F.G. <i>et al.</i> (2017) Reconstitution of immune cell populations in multiple</li> </ol>
	sclerosis patients after autologous stem cell transplantation. <u>Clin Exp Immunol. 189 (3):</u> <u>268-278.</u>
	11. Rossatti, P. <i>et al.</i> (2022) Rapid increase in transferrin receptor recycling promotes adhesion during T cell activation. <u>BMC Biol. 20 (1): 189.</u>
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/MCA2806SBR670 20471
Regulatory	For research purposes only

# 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-ra	ad.com	Email: antibody_sales_uk@bio-ra	id.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 'M437309:250311'

#### Printed on 11 Mar 2025

© 2025 Bio-Rad Laboratories Inc | Legal | Imprint