

# Datasheet: MCA2806SBB700

Description:	MOUSE ANTI HUMAN CD69:StarBright Blue 700
Specificity:	CD69
Other names:	AIM
Format:	StarBright Blue 700
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	Νο	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 <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 Blue 700 - liquid						
Max Ex/Em	Fluorophore StarBright Blue 700	Excitation Ma 473	x (nm) Err	nission Max (nm) 703			
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered sa	lline					

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>			

Regulatory	For research purposes only
Information	https://www.bio-rad-antibodies.com/SDS/MCA2806SBB700 20471
Health And Safety	Material Safety Datasheet documentation #20471 available at:
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Guarantee	12 months from date of despatch
Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
	<ul> <li>(3): 581-8.</li> <li>10. Karnell, F.G. <i>et al.</i> (2017) Reconstitution of immune cell populations in multiple sclerosis patients after autologous stem cell transplantation. <u>Clin Exp Immunol. 189 (3):</u> 268-278.</li> <li>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></li> </ul>
	<ol> <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 Regulatory Type 1 Cell Population with a Stable Phenotype. <u>J Immunol. 191: 5895-903.</u></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></li> </ol>

## 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	d.com	Email: antibody_sales_uk@bio-ra	d.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 'M437306:250311'

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