

## Datasheet: MCA2806SBV475 BATCH NUMBER 100005875

Description:	MOUSE ANTI HUMAN CD69:StarBright Violet 475		
Specificity:	CD69		
Other names:	AIM		
Format:	StarBright Violet 475		
Product Type:	Monoclonal Antibody		
Clone:	FN50		
Isotype:	lgG1		

## **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 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	Reacts with: Baboon, Chimpanzee, Cynomolgus monkey, Rhesus Monkey, Macaque					
Reactivity	<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 Violet 475 - liquid					
Max Ex/Em	Fluorophore	Excitation Max (nm	Emission Max (nm)			
	StarBright Violet 475	405	479			
Preparation	Purified IgG prepared supernatant	by affinity chromato	graphy on Protein G fror	n tissue culture		

Buffer Solution	Phosphate buffered saline		
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		
Immunogen	Activated human B-cells.		
External Database Links	UniProt:		
Synonyms	CLEC2C		
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 transmembra 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). 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). Expressio of CD69 is rapidly induced on activation by infection or chronic inflamation ( <u>Sancho <i>et a</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.	ne	
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. 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. Int J Cance 44 (6): 975-80.</li> <li>Herberth, M. <i>et al.</i> (2010) Differential effects on T-cell function following exposure to serum from schizophrenia smokers. Mol Psychiatry. 15 (4): 364-71.</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. J Immunol. 187 (11): 5645-52.</li> <li>Sela, M. <i>et al.</i> (2011) Sequential phosphorylation of SLP-76 at tyrosine 173 is require for activation of T and mast cells. EMBO J. 30 (15): 3160-72.</li> <li>Garbe, Y. <i>et al.</i> (2011) Semiallogenic fusions of MSI(+) tumor cells and activated B cells.</li> </ol>	<u>.</u> d	

	<ul> <li>induce MSI-specific T cell responses. <u>BMC Cancer. 11: 410.</u></li> <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> <li>7. 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>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></li> <li>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. <u>Am J Pathol. 187</u> (<u>3): 581-8.</u></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): 268-278.</u></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>
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/MCA2806SBV475 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	d.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						

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