

Datasheet: MCA2806GA

## **BATCH NUMBER 166330**

Description:	MOUSE ANTI HUMAN CD69
Specificity:	CD69
Other names:	AIM
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	FN50
Isotype:	lgG1
Quantity:	0.1 mg

# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1/25 - 1/200
Immunohistology - Frozen	•			
Immunohistology - Paraffin			•	
ELISA				
Immunoprecipitation			•	
Western Blotting			•	
Immunofluorescence				

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, Rhe N.B. Antibody reactivity and working conditions may vary between reactivity is derived from testing within our laboratories, peer-repersonal communications from the originators. Please refer to further information.	reen species. Cross eviewed publications or
Product Form	Purified IgG - liquid	

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide		
Carrier Free	Yes		
Approx. Protein Concentrations	IgG concentration 1.0mg/ml		
Immunogen	Activated human B-cells.		
External Database Links	UniProt:  Q07108 Related reagents		
	Entrez Gene:  969 CD69 Related reagents		
Synonyms	CLEC2C		
RRID	AB_11152603		
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 transmembrar glycoprotein of ~30 kDa containing a single C-type lectin domain and a single potential N-glycosylation site. CD69 is expressed as a disulphide bond linked homodimer of ~60 kDa (López-Cabrera et al. 1993).		
	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 et al. 1992</u> ). Expression of CD69 is rapidly induced on activation by infection or chronic inflamation ( <u>Sancho et al. 2005</u> ). Multiple dimeric glycoforms of CD69 can be formed through differential glycosylation of the monomeric subunits ( <u>Vance et al. 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 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.		
References	<ol> <li>Holte, H. et al. (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 Cance 44 (6): 975-80.</u></li> <li>Herberth, M. et al. (2010) Differential effects on T-cell function following exposure to serum from schizophrenia smokers. <u>Mol Psychiatry. 15 (4): 364-71.</u></li> </ol>	<u>ər.</u>	

- 3. Schaeuble, K. *et al.* (2011) Cross-talk between TCR and CCR7 signaling sets a temporal threshold for enhanced T lymphocyte migration. J Immunol. 187 (11): 5645-52.
- 4. Sela, M. *et al.* (2011) Sequential phosphorylation of SLP-76 at tyrosine 173 is required for activation of T and mast cells. EMBO J. 30 (15): 3160-72.
- 5. Garbe, Y. *et al.* (2011) Semiallogenic fusions of MSI(+) tumor cells and activated B cells induce MSI-specific T cell responses. <u>BMC Cancer.</u> 11: 410.
- 6. Schwitalle, Y. *et al.* (2004) Immunogenic peptides generated by frameshift mutations in DNA mismatch repair-deficient cancer cells. <u>Cancer Immun. 4: 14.</u>
- 7. Sutavani, R.V. *et al.* (2013) CD55 Costimulation Induces Differentiation of a Discrete T Regulatory Type 1 Cell Population with a Stable Phenotype. <u>J Immunol</u>. 191: 5895-903.
- 8. Walter, G.J. *et al.* (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. *et al.* (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> (3): 581-8.
- 10. Karnell, F.G. *et al.* (2017) Reconstitution of immune cell populations in multiple sclerosis patients after autologous stem cell transplantation. <u>Clin Exp Immunol. 189 (3):</u> 268-278.
- 11. Rossatti, P. *et al.* (2022) Rapid increase in transferrin receptor recycling promotes adhesion during T cell activation. <u>BMC Biol. 20 (1): 189.</u>

#### **Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2806GA">https://www.bio-rad-antibodies.com/SDS/MCA2806GA</a> 10040	
Regulatory	For research purposes only	

# **Related Products**

### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR13...) HRP
Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Goat Anti Mouse IgG (STAR70...)

**FITC** 

## **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M421818:230727'

### Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint