

Datasheet: MCA2806SBB615

Description:	MOUSE ANTI HUMAN CD69:StarBright Blue 615
Specificity:	CD69
Other names:	AIM
Format:	StarBright Blue 615
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 Reactivity	<b>N.B.</b> Antibody reactived freactivity is derived f	vity and working condit from testing within our I	ions may vary betw aboratories, peer-re	sus Monkey, Macaque reen species. Cross eviewed publications or references indicated for	
Product Form	Purified IgG conjugated to StarBright Blue 615 - liquid				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	n)	
	StarBright Blue 615	475	612		
Preparation	Purified IgG prepare supernatant	d by affinity chromatog	raphy on Protein G	from tissue culture	
Buffer Solution	Phosphate buffered	saline			

# Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)1% Bovine Serum Albumin

0.1% Pluronic F680.1% PEG 33500.05% Tween 20

### Immunogen

Activated human B-cells.

# External Database Links

#### **UniProt:**

Q07108 Related reagents

#### **Entrez Gene:**

969 CD69 Related reagents

### **Synonyms**

CLEC<sub>2</sub>C

#### **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 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 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

- 1. 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 Cancer.</u> 44 (6): 975-80.
- 2. Herberth, M. *et al.* (2010) Differential effects on T-cell function following exposure to serum from schizophrenia smokers. <u>Mol Psychiatry</u>. 15 (4): 364-71.
- 3. Schaeuble, K. *et al.* (2011) Cross-talk between TCR and CCR7 signaling sets a temporal threshold for enhanced T lymphocyte migration. <u>J Immunol</u>. 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. Cancer Immun. 4: 14.

- 7. Sutavani, R.V. et al. (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. 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. Am J Pathol. 187 (3): 581-8.
- 10. Karnell, F.G. et al. (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. et al. (2022) Rapid increase in transferrin receptor recycling promotes adhesion during T cell activation. BMC Biol. 20 (1): 189.

Store at +4°C. DO NOT FREEZE.
This product should be stored undiluted.
12 months from date of despatch
This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Material Safety Datasheet documentation #20471 available at:
https://www.bio-rad-antibodies.com/SDS/MCA2806SBB615
20471
For research purposes only

# Related Products

### **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

North & South Tel: +1 800 265 7376 America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 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 'M407318:221007'

### Printed on 15 May 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint