

Datasheet: MCA1268F

Description:	MOUSE ANTI HUMAN CD39:FITC		
Specificity:	CD39		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Clone:	A1		
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 www.bio-rad-antibodies.com/protocols.

	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			
Product Form	Purified IgG conjugat	ed to Fluorescein Isotl	niocyanate Isomer 1	l (FITC) - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525	
Preparation	Antibody purified fror	n tissue culture supern	atant	
Buffer Solution	Phosphate buffered s	saline		
Preservative	0.09% sodium azide			
Stabilisers	1% bovine serum alb	umin		
Approx. Protein Concentrations	IgG concentration 0.	l mg/ml		
Immunogen	PHA activated human	n lymphocytes		

External Database

Links

UniProt:

P49961 Related reagents

Entrez Gene:

953 ENTPD1 Related reagents

Synonyms

CD39

RRID

AB_323605

Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line

Specificity

Mouse anti Human CD39, clone A1 recognizes the human CD39 cell surface antigen, a ~70-100 kDa molecule expressed on peripheral blood B cells, T cells and monocytes, and weakly expressed by granulocytes.

CD39 has intrinsic ecto-ATPase activity (<u>Wang et al. 1996</u>), and expression can be induced on T cells and increased on B cells, as a late activation antigen (<u>Maliszewski et al. 1994</u>).

Mouse anti Human CD39, clone A1 has been shown to block MHC independent target cell recognition by hapten-specific CTL (Stockl *et al.* 2001).

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells or 100µl whole blood

References

- 1. Waugh, J.A. *et al.* (1989) Staining of normal and rejecting kidney using the activation panel. In: Leucocyte Typing IV. White cell differentiation antigens. Edited by Knapp, W. *et al.*Oxford University Press. p485.
- 2. Aversa, G.G. and Hall, B.M. (1989) Activation panel antigen expression on PBL activated by PHA or in MLR. In: Leucocyte Typing IV. White cell differentiation antigens. Edited by Knapp, W. *et al.* Oxford University Press, p.498.
- 3. Aversa, G.G. *et al.* (1989) Use of monoclonal antibodies to study *in vivo* and *in vitro*-activated lymphocytes. <u>Transplant Proc. 21 (1 Pt 1): 349-50.</u>
- 4. Stein, H. *et al.* (1989) Activated Section report. In: Leucocyte Typing IV. White cell differentiation antigens. Edited by Knapp, W. *et al.* Oxford University Press, p.387.
- 5. Suranyi, M.G. *et al.* (1991) Lymphocyte adhesion molecules in T cell-mediated lysis of human kidney cells. <u>Kidney Int. 39 (2): 312-9.</u>
- 6. Stöckl, J. *et al.* (2001) Monomorphic molecules function as additional recognition structures on haptenated target cells for HLA-A1-restricted, hapten-specific CTL. <u>J. Immunol.</u> 167 (5): 2724-33.
- 7. Borsellino, G. *et al.* (2007) Expression of ectonucleotidase CD39 by Foxp3+ Treg cells: hydrolysis of extracellular ATP and immune suppression <u>Blood. 110:1225-32.</u>
- 8. Glenn, J.R. *et al.* (2008) Raised levels of CD39 in leucocytosis result in marked inhibition of ADP-induced platelet aggregation via rapid ADP hydrolysis. <u>Platelets. 19:</u> 59-69.
- 9. Loeuillet, C. et al. (2008) In vitro whole-genome analysis identifies a susceptibility locus

for HIV-1. PLoS Biol. 6: e32.

- 10. Alam, M.S. *et al.* (2009) CD73 is expressed by human regulatory T helper cells and suppresses proinflammatory cytokine production and Helicobacter felis-induced gastritis in mice. J Infect Dis. 199: 494-504.
- 11. Scholzen, A. *et al.* (2009) Plasmodium falciparum-mediated induction of human CD25Foxp3 CD4 T cells is independent of direct TCR stimulation and requires IL-2, IL-10 and TGFbeta. <u>PLoS Pathog. 5: e1000543.</u>
- 12. Mittag, D. *et al.* (2010) The effector T cell response to ryegrass pollen is counterregulated by simultaneous induction of regulatory T cells. <u>J Immunol. 184:</u> 4708-16.
- 13. Rawstron, A.C. *et al.* (2010) Chronic lymphocytic leukaemia (CLL) and CLL-type monoclonal B-cell lymphocytosis (MBL) show differential expression of molecules involved in lymphoid tissue homing. Cytometry B Clin Cytom. 78 Suppl 1: S42-6.
- 14. Moreno-Fernandez, M.E. *et al.* (2011) Regulatory T cells control HIV replication in activated T cells through a cAMP-dependent mechanism. <u>Blood. 117: 5372-80.</u>
- 15. Häusler SF *et al.* (2014) Anti-CD39 and anti-CD73 antibodies A1 and 7G2 improve targeted therapy in ovarian cancer by blocking adenosine-dependent immune evasion. <u>Am J Transl Res. 6 (2): 129-39.</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. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1268F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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

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