

Datasheet: MCA1268PE

BATCH NUMBER INN1704

Description:	MOUSE ANTI HUMAN CD39:RPE	
Specificity:	CD39	
Format:	RPE	
Product Type:	Monoclonal Antibody	
Clone:	A1	
Isotype:	lgG1	
Quantity:	100 TESTS	

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 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 recomended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Human		
Product Form	Purified IgG conjuga	ated to R. Phycoerythrin	(RPE) - lyophilized
Reconstitution	Reconstitute with 1 i	ml distilled water	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepare supernatant	ed by affinity chromatog	raphy on Protein A f
Buffer Solution	Phosphate buffered	saline	
Preservative Stabilisers	0.09% Sodium Azide	e	
	1% Bovine Serum Albumin		
	5% Sucrose		

Immunogen	PHA activated human lymphocytes
External Database Links	UniProt:
	P49961 Related reagents
	Entrez Gene:
	953 ENTPD1 Related reagents
Synonyms	CD39
RRID	AB_324696
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 (<u>Stockl et al. 2001</u>).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	1. Aversa, G.G. <i>et al.</i> (1988) Detection of a late lymphocyte activation marker by A1, a new monoclonal antibody. <u>Transplant Proc. 20 (1): 49-52.</u>
	2. Waugh, J.A. <i>et al.</i> (1989) Staining of normal and rejecting kidney using the activation panel. In: Leucocyte Typing IV. White cell differentiation antigens. Edited by Knapp, W. <i>et al.</i> Oxford University Press. p485.
	3. 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. <i>et al.</i> Oxford University Press, p.498.
	4. Aversa, G.G. <i>et al.</i> (1989) Use of monoclonal antibodies to study in vivo and in vitro-
	activated lymphocytes. Transplant Proc. 21 (1 Pt 1): 349-50.
	 5. Stein, H. <i>et al.</i> (1989) Activated Section report. In: Leucocyte Typing IV. White cell differentiation antigens. Edited by Knapp, W. <i>et al.</i> Oxford University Press, p.387. 6. Suranyi, M.G. <i>et al.</i> (1991) Lymphocyte adhesion molecules in T cell-mediated lysis of human kidney cells. Kidney Int. 39 (2): 313.0
	human kidney cells. Kidney Int. 39 (2): 312-9. 7. Stöckl, J. et al. (2001) Monomorphic molecules function as additional recognition structures on haptenated target cells for HLA-A1-restricted, hapten-specific CTL. J. Immunol. 167 (5): 2724-33.
	8. Scholzen, A. <i>et al.</i> (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. PLoS Pathog. 5: e1000543.

- 9. Borsellino, G. *et al.* (2007) Expression of ectonucleotidase CD39 by Foxp3+ Treg cells: hydrolysis of extracellular ATP and immune suppression Blood. 110:1225-32.
- 10. 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.
- 11. Loeuillet, C. *et al.* (2008) In vitro whole-genome analysis identifies a susceptibility locus for HIV-1. PLoS Biol. 6: e32.
- 12. 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.
- 13. 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.
- 14. Moreno-Fernandez, M.E. *et al.* (2011) Regulatory T cells control HIV replication in activated T cells through a cAMP-dependent mechanism. Blood. 117: 5372-80.
- 15. Guevara-Flores, A. *et al.* (2008) 5'-p-Fluorosulfonyl benzoyl adenosine inhibits an ecto-ATP-diphosphohydrolase in the tegument surface of Taenia crassiceps cysticerci. <u>Mol Biochem Parasitol</u>. 162: 123-33.
- 16. 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.
- 17. 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</u> J Transl Res. 6 (2): 129-39.

Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

This product should be stored undiluted.

DO NOT FREEZE. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1268PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375301:210104'

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