Datasheet: MCA1268EL

Description:	MOUSE ANTI HUMAN CD39:Low Endotoxin
Specificity:	CD39
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	A1
Isotype:	IgG1
Quantity:	0.5 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	▪			1/10 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			
Functional Assays	▪			

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	<0.01EU/ug
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	PHA activated human lymphocytes
External Database Links	**UniProt:** P49961 Related reagents **Entrez Gene:** 953 ENTPD1 Related reagents
Synonyms	CD39
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 (Wang *et al.* 1996), and expression can be induced on T cells and increased on B cells, as a late activation antigen (Maliszewski *et al.* 1994). 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 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood.
References	1. Aversa, G.G. *et al.* (1988) Detection of a late lymphocyte activation marker by A1, a new monoclonal antibody. Transplant Proc. 20 (1): 49-52. 2. 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. 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. *et al.* Oxford University Press, p.498. 4. Aversa, G.G. *et al.* (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. *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. 6. Suranyi, M.G. *et al.* (1991) Lymphocyte adhesion molecules in T cell-mediated lysis of 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. *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. 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. J Immunol. 184: 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. Mol Biochem Parasitol. 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. Platelets. 19: 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. Am J Transl Res. 6 (2): 129-39.

Storage	Store at -20ºC only. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin (MCA928EL)

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