Datasheet: MCA81SBB615 BATCH NUMBER 100006909

Description:	MOUSE ANTI HUMAN HLA ABC:StarBright Blue 615			
Specificity:	HLA ABC			
Format:	StarBright Blue 615			
Product Type:	Monoclonal Antibody			
Clone:	W6/32			
Isotype:	lgG2a			
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	s. Please r	efer to references	s indicated for further	
	information. For general protocol recommendations, please visit <u>www.bio-</u>					
	rad-antibodies.com/pro	otocols.				
		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 p	procedure	s. Suggested worl	king dilutions are given as	
	a guide only. It is recommended that the user titrates the product for use in their own					
	system using appropria	ate negative/p	ositive co	ntrols.		
Target Species	Human					
Species Cross	Reacts with: Macaque	, Bovine, Cyno	omolgus n	nonkey, Baboon, I	Rhesus Monkey,	
Reactivity	Chimpanzee, Gorilla, S	Shrew				
	Does not react with:Go	oat, Dog, Guin	iea Pig, R	abbit, Mouse, Chi	cken, Amphibia	
	N.B. Antibody reactivit	y and working	condition	is may vary betwe	en species. Cross	
	reactivity is derived from testing within our laboratories, peer-reviewed public					
personal communications from the originators. Please refer to					eferences indicated for	
	further information.					
Product Form	Purified IgG conjugated to StarBright Blue 615 - liquid					
Max Ex/Em	Fluorophore	Excitation Ma	ax (nm) E	Emission Max (nm)		
	StarBright Blue 615	475		612		
Preparation	Purified IgG prepared supernatant	by affinity chro	omatograp	ohy on Protein G f	from tissue culture	

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
Immunogen	Purified human tonsil lymphocyte membranes.
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1/1-Ag4.1 myeloma cell line.
Specificity	Mouse anti Human HLA ABC antibody, clone W6/32 recognizes an antigenic determinant shared among products of the HLA A, B and C loci. Clone W6/32 recognizes a conformational epitope, reacting with HLA class I alpha3 and alpha2 domains. The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In humans, this complex is referred to as the human leukocyte antigen (HLA) region. There are 3 major MHC class I proteins encoded by the HLA which are HLA A, HLA B and HLA C. These proteins are found on the surface of almost all nucleated somatic cells. Mouse anti Human HLA ABC antibody, clone W6/32 is routinely tested in flow cytometry on human peripheral blood lymphocytes
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 ⁶ cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	 Brodsky, F.M. & Parham, P. (1982) Evolution of HLA antigenic determinants: species cross-reactions of monoclonal antibodies. Immunogenetics. 15 (2): 151-66. Neefjes, J.J. <i>et al.</i> (1986) A biochemical characterization of feline MHC products: unusually high expression of class II antigens on peripheral blood lymphocytes. Immunogenetics. 23 (5): 341-7. Stern, P.L. <i>et al.</i> (1987) Class I-like MHC molecules expressed by baboon placental syncytiotrophoblast. J Immunol. 138 (4): 1088-91. Jacobsen, C.N. <i>et al.</i> (1993) Reactivities of 20 anti-human monoclonal antibodies with leucocytes from ten different animal species. Vet Immunol Immunopathol. 39 (4): 461-6. Verbeek, M.M. <i>et al.</i> (1995) T lymphocyte adhesion to human brain pericytes is mediated via very late antigen-4/vascular cell adhesion molecule-1 interactions. J Immunol. 154 (11): 5876-84. Raftery, M.J. <i>et al.</i> (2002) Hantavirus infection of dendritic cells. J Virol. 76: 10724-33. Dressel, R. <i>et al.</i> (2003) Differential effect of acute and permanent heat shock protein 70 overexpression in tumor cells on lysability by cytotoxic T lymphocytes. Cancer Res. 63 (23): 8212-20. Ishitani, A. <i>et al.</i> (2003) Protein expression and peptide binding suggest unique and interacting functional roles for HLA-E, F, and G in maternal-placental immune recognition. J Immunol. 171 (3): 1376-84. Giuliani, F. <i>et al.</i> (2003) Vulnerability of human neurons to T cell-mediated cytotoxicity. J

Immunol. 171: 368-79.

10. Smith, A.C. *et al.* (2005) Interaction of the *Salmonella*-containing vacuole with the endocytic recycling system. <u>J Biol Chem. 280: 24634-41.</u>

Zuo, J. *et al.* (2008) The DNase of gammaherpesviruses impairs recognition by virus-specific CD8+ T cells through an additional host shutoff function. <u>J Virol. 82: 2385-93.</u>
 Shi, J. *et al.* (2008) Bortezomib down-regulates the cell-surface expression of HLA

class I and enhances natural killer cell-mediated lysis of myeloma. <u>Blood. 111: 1309-17.</u>

13. Watling, D. *et al.* (2008) Multiple kinases in the interferon-gamma response. <u>Proc Natl</u> <u>Acad Sci U S A. 105: 6051-6.</u>

14. Grotzke, J.E. *et al.* (2009) The *Mycobacterium tuberculosis* phagosome is a HLA-I processing competent organelle. <u>PLoS Pathog. 5: e1000374.</u>

15. Koch, N. *et al.* (2009) IL-10 protects monocytes and macrophages from complementmediated lysis. J Leukoc Biol. 86: 155-66.

16. Spentzou, A. *et al.* (2010) Viral inhibition assay: a CD8 T cell neutralization assay for use in clinical trials of HIV-1 vaccine candidates. J Infect Dis. 201: 720-9.

17. Vitadello, M. *et al.* (2010) Myofiber stress-response in myositis: parallel investigations on patients and experimental animal models of muscle regeneration and systemic inflammation. <u>Arthritis Res Ther. 12: R52.</u>

18. Hinrichs, J. *et al.* (2010) The nature of peptides presented by an HLA class I low expression allele. <u>Haematologica</u>. <u>95: 1373-80.</u>

19. Fujita, Y. *et al.* (2010) Bone marrow transplantation restores epidermal basement membrane protein expression and rescues epidermolysis bullosa model mice. <u>Proc Natl</u> Acad Sci U S A. 107: 14345-50.

20. Narita, M. *et al.* (2010) WT1 peptide vaccination in combination with imatinib therapy for a patient with CML in the chronic phase. <u>Int J Med Sci. 7: 72-81.</u>

21. Zuo, J. *et al.* (2011) The Epstein-Barr virus-encoded BILF1 protein modulates immune recognition of endogenously processed antigen by targeting major histocompatibility complex class I molecules trafficking on both the exocytic and endocytic pathways. <u>J Virol.</u> 85: 1604-14.

22. Lask, A. *et al.* (2011) TCR-Independent Killing of B Cell Malignancies by Anti-Third-Party CTLs: The Critical Role of MHC-CD8 Engagement. J Immunol. 187: 2006-14.

23. Jones, D.C. *et al.* (2011) HLA Class I Allelic Sequence and Conformation Regulate Leukocyte Ig-Like Receptor Binding. <u>J Immunol. 186: 2990-7.</u>

24. Enose-Akahata, Y. *et al.* (2012) Minocycline modulates antigen-specific CTL activity through inactivation of mononuclear phagocytes in patients with HTLV-I associated neurologic disease. <u>Retrovirology. 9: 16.</u>

25. Badrinath, S. *et al.* (2012) Position 156 influences the peptide repertoire and tapasin dependency of human leukocyte antigen B*44 allotypes. <u>Haematologica. 97: 98-106.</u>

26. Tannetta, D.S. *et al.* (2013) Characterisation of syncytiotrophoblast vesicles in normal pregnancy and pre-eclampsia: expression of Flt-1 and endoglin. <u>PLoS One. 8 (2): e56754.</u>
 27. Dragovic, R.A. *et al.* (2015) Isolation of syncytiotrophoblast microvesicles and

exosomes and their characterisation by multicolour flow cytometry and fluorescence Nanoparticle Tracking Analysis. <u>Methods. 87: 64-74.</u>

28. Tischer, S. *et al.* (2016) Discovery of immunodominant T-cell epitopes reveals penton protein as a second immunodominant target in human adenovirus infection. <u>J Transl Med.</u> <u>14 (1): 286.</u>

	29. Praest, P. <i>et al.</i> (2019) A Flow Cytometry-Based Approach to Unravel Viral Interference with the MHC Class I Antigen Processing and Presentation Pathway.
	30. Juan, C.H. <i>et al.</i> (2020) <i>In Vitro</i> Differentiation of Human Placenta-Derived Multipotent Cells into Schwann-Like Cells. Biomolecules. 10 (12): 1657.
	31. Tupova, L. <i>et al.</i> (2020) Interplay of drug transporters P-glycoprotein (MDR1), MRP1, OATP1A2 and OATP1B3 in passage of maraviroc across human placenta. <u>Biomed</u> <u>Pharmacother. 129: 110506.</u>
	 32. Nguyen, J. <i>et al.</i> (2021) Quantitative contributions of TNF receptor superfamily members to CD8⁺ T-cell responses. <u>Mol Syst Biol. 17 (11): e10560.</u> 33. Xia, P. <i>et al.</i> (2022) NLRP3 inflammasome up-regulates major histocompatibility complex class L expression and promotes inflammatory infiltration in polymyceitia. <u>PMC</u>
	 Immunol. 23 (1): 39. 34. Cacciola, R. <i>et al.</i> (2022) Impact of Anti-Endothelial Cell Antibodies (AECAs) in Patients with Polycythemia Vera and Thrombosis <u>Diagnostics</u>. 12 (5): 1077. 35. Korbonits, L. <i>et al.</i> (2022) <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> Infected Cows Reveal Divergent Immune Response in Bovine Peripheral Blood Derived Lymphocyte Proteome. <u>Metabolites.12 (10): 924.</u> 36. Lyssy, F. <i>et al.</i> (2023) Platelet-derived factors dysregulate placental sphingosine- 1-phosphate receptor 2 in human trophoblasts. <u>Reprod Biomed Online</u>. 47 (2): 103215. 37. Forstner, D. <i>et al.</i> (2023) CD39 abrogates platelet-derived factors induced IL-1β expression in the human placenta. <u>Front Cell Dev Biol</u>. 11: 1183793. 38. Zheng, S. <i>et al.</i> (2022) The SARS-CoV-2 accessory factor ORF7a downregulates MHC class I surface expression. <u>bioRxiv 30 May [Epub ahead of print. Preprint]</u> 39. Fielding, C.A. <i>et al.</i> (2022) SARS-CoV-2 host-shutoff impacts innate NK cell functions,
	but antibody-dependent NK activity is strongly activated through non-spike antibodies. <u>11:</u> e74489.
Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA81SBB615 20471
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & Sou	th 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	То
	Email: antibody_sales_us@	bio-rad.com	Email: antibody_sales_uk@bi	o-rad.com	Email: antibody_sales_de@bio-ra	ad.comd a
bat	ch/lot specific datasheet	for this product a	olease use our online sear	ch tool at: hio.	rad-antibodies com/datashee	te

batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M407322:221007'

Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint