

Datasheet: MCA81PB

BATCH NUMBER 1611

Description:	MOUSE ANTI HUMAN HLA ABC:Pacific Blue®
Specificity:	HLA ABC
Format:	Pacific Blue®
Product Type:	Monoclonal Antibody
Clone:	W6/32
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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

Species Cross Reactivity

Reacts with: Macaque, Bovine, Cynomolgus monkey, Baboon, Rhesus Monkey, Chimpanzee, Gorilla, Shrew

Does not react with: Goat, Dog, Guinea Pig, Rabbit, Mouse, Chicken, Amphibia

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Pacific Blue - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Pacific Blue®	410	455

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
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	<p>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.</p> <p>Mouse anti Human HLA ABC antibody, clone W6/32 is routinely tested in flow cytometry on human peripheral blood lymphocytes.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul
References	<ol style="list-style-type: none"> 1. Barnstable, C.J. <i>et al.</i> (1978) Production of monoclonal antibodies to group A erythrocytes, HLA and other human cell surface antigens-new tools for genetic analysis. Cell. 14 (1): 9-20. 2. 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. 3. Yoshino, N. <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (<i>Macaca fascicularis</i>) by using anti-human cross-reactive antibodies. Exp Anim. 49 (2): 97-110. 4. 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. 5. Stern, P.L. <i>et al.</i> (1987) Class I-like MHC molecules expressed by baboon placental syncytiotrophoblast. J Immunol. 138 (4): 1088-91. 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. 7. Tanabe, M. <i>et al.</i> (1992) Structural and functional analysis of monomorphic determinants recognized by monoclonal antibodies reacting with the HLA class I alpha 3 domain. J Immunol. 148 (10): 3202-9. 8. 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.](#)

9. Dressel, R. *et al.* (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.](#)

10. Brodsky, F.M. & Parham, P. (1982) Evolution of HLA antigenic determinants: species cross-reactions of monoclonal antibodies. [Immunogenetics. 15 \(2\): 151-66.](#)

11. Hinrichs, J. *et al.* (2010) The nature of peptides presented by an HLA class I low expression allele. [Haematologica. 95: 1373-80.](#)

12. Jones, D.C. *et al.* (2011) HLA Class I Allelic Sequence and Conformation Regulate Leukocyte Ig-Like Receptor Binding. [J Immunol. 186: 2990-7.](#)

13. 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.](#)

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

15. Grotzke, J.E. *et al.* (2009) The Mycobacterium tuberculosis phagosome is a HLA-I processing competent organelle. [PLoS Pathog. 5: e1000374.](#)

16. Narita, M. *et al.* (2010) WT1 peptide vaccination in combination with imatinib therapy for a patient with CML in the chronic phase. [Int J Med Sci. 7: 72-81.](#)

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. [Arthritis Res Ther. 12: R52.](#)

18. 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. [J Virol. 85: 1604-14.](#)

19. 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. [Retrovirology. 9: 16.](#)

20. Badrinath, S. *et al.* (2012) Position 156 influences the peptide repertoire and tapasin dependency of human leukocyte antigen B*44 allotypes. [Haematologica. 97: 98-106.](#)

21. Tischer, S. *et al.* (2016) Discovery of immunodominant T-cell epitopes reveals penton protein as a second immunodominant target in human adenovirus infection. [J Transl Med. 14 \(1\): 286.](#)

22. Dragovic, R.A. *et al.* (2015) Isolation of syncytiotrophoblast microvesicles and exosomes and their characterisation by multicolour flow cytometry and fluorescence Nanoparticle Tracking Analysis. [Methods. 87: 64-74.](#)

23. Praest, P. *et al.* (2019) A Flow Cytometry-Based Approach to Unravel Viral Interference with the MHC Class I Antigen Processing and Presentation Pathway. [Methods Mol Biol. 1988: 187-98.](#)

24. Tannetta, D.S. *et al.* (2013) Characterisation of syncytiotrophoblast vesicles in normal pregnancy and pre-eclampsia: expression of Flt-1 and endoglin. [PLoS One. 8 \(2\): e56754.](#)

25. Juan, C.H. *et al.* (2020) *In Vitro* Differentiation of Human Placenta-Derived Multipotent Cells into Schwann-Like Cells. [Biomolecules. 10 \(12\) Dec 10 \[Epub ahead of print\].](#)

26. Tupova, L. *et al.* (2020) Interplay of drug transporters P-glycoprotein (MDR1), MRP1, OATP1A2 and OATP1B3 in passage of maraviroc across human placenta. [Biomed Pharmacother. 129: 110506.](#)

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Acknowledgements This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA81PB>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL: Pacific Blue® \(MCA929PB\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

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](https://www.bio-rad-antibodies.com/datasheets)
'M369020:200529'

Printed on 08 Mar 2024