Datasheet: MCA81

BATCH NUMBER 149333

Description:	MOUSE ANTI HUMAN HLA ABC
Specificity:	HLA ABC
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	W6/32
Isotype:	IgG2a
Quantity:	0.2 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	▪			1/50 - 1/100
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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

(1)**The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

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 - liquid
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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified human tonsil lymphocyte membranes.
RRID	AB_322094
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 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood
Histology Positive Control Tissue	Tonsil
References	1. Barnstable, C.J. *et al.* (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. *et al.* (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. *et al.* (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by

using anti-human cross-reactive antibodies. Exp Anim. 49 (2): 97-110.
4. Neefjes, J.J. *et al.* (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. *et al.* (1987) Class I-like MHC molecules expressed by baboon placental syncytiotrophoblast. J Immunol. 138 (4): 1088-91.
6. Verbeek, M.M. *et al.* (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. *et al.* (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. *et al.* (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. 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
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA81 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

Recommended Negative Controls

North & South America	Tel: +1 800 265 7376 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

'M369004:200529'

Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint