

Datasheet: MCA81SBV670

### **BATCH NUMBER 100004939**

Description:	MOUSE ANTI HUMAN HLA ABC:StarBright Violet 670
Specificity:	HLA ABC
Format:	StarBright Violet 670
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. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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					
	<b>N.B.</b> Antibody reactive reactivity is derived from	ity and working condit om testing within our I	ions may vary betwo aboratories, peer-re			
Product Form	Purified IgG conjugat	ed to StarBright Violet	670 - liquid			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	n)		
	StarBright Violet 670	400	667			
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein G	from tissue culture		

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN <sub>3</sub> )
Stabilisers	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 <sup>6</sup> cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	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. *et al.* (1992) Structural and functional analysis of monomorphic determinants recognized by monoclonal antibodies reacting with the HLA class I alpha 3 domain. <u>J Immunol. 148 (10): 3202-9.</u>
- 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. <u>Cancer Res. 63</u> (23): 8212-20.
- 10. Brodsky, F.M. & Parham, P. (1982) Evolution of HLA antigenic determinants: species cross-reactions of monoclonal antibodies. <u>Immunogenetics</u>. 15 (2): 151-66.
- 11. Hinrichs, J. *et al.* (2010) The nature of peptides presented by an HLA class I low expression allele. <u>Haematologica</u>. 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. <u>Proc Natl</u> 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. <u>PLoS Pathog. 5: e1000374.</u>
- 16. 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>
- 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. <u>J Virol.</u> 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. <u>Haematologica</u>. 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. <u>J Transl Med.</u> 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. <u>Methods. 87: 64-74.</u>
- 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. <u>Methods Mol Biol.</u> 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. <u>PLoS One. 8 (2): e56754.</u>
  25. Juan, C.H. *et al.* (2020) *In Vitro* Differentiation of Human Placenta-Derived Multipotent Cells into Schwann-Like Cells. <u>Biomolecules. 10 (12) Dec 10 [Epub ahead of print].</u>
  26. Tupova, L. *et al.* (2020) Interplay of drug transporters P-glycoprotein (MDR1), MRP1, OATP1A2 and OATP1B3 in passage of maraviroc across human placenta. <u>Biomed</u>

### Pharmacother. 129: 110506.

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 fore counterparts	ign
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA81SBV670">https://www.bio-rad-antibodies.com/SDS/MCA81SBV670</a> 20471	
Regulatory	For research purposes only	

# **Related Products**

# **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

America Fax: +1 919 878 3751

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

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 'M376261:210127'

#### Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint