

Datasheet: MCA2200A647

Description:	MOUSE ANTI C-MYC:Alexa Fluor® 647
Specificity:	C-MYC
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	9E10
lsotype:	lgG1
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 <u>www.bio-</u> rad-antibodies.com/protocols.					
		Yes N	o Not Determined	Suggested Dilution		
	Flow Cytometry (1)	-		Neat		
	hnique this does not					
	necessarily exclude its use in such procedures. Suggested working dilutions are given a a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls. (1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code <u>BUF09</u>) is recommended for this purpose.					
Target Species	Human					
Species Cross Reactivity	Reacts with: Epitope tag 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 Alexa Fluor® 647 - liquid					
Max Ex/Em	Fluorophore	Excitation Max	nm) Emission Max (nm)			
	Alexa Fluor®647	650	665			
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 (NaN ₃) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Synthetic peptide sequence corresponding to the C-terminal region (residues 408-439) of human c-myc conjugated to keyhole limpet hemocyanin.
External Database Links	UniProt: P01106 Related reagents Entrez Gene: 4609 MYC Related reagents
Synonyms	BHLHE39
RRID	AB_566936
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 myeloma cell line.
Specificity	 Mouse anti c-myc antibody, clone 9E10 detects the p62^{c-myc} proto-oncogene protein, which is involved in the regulation of the cell cycle and cell growth. C-myc is primarily located to the cell nucleus, but has also been shown to localized to the cytoplasm in several cell lines (Craig <i>et al.</i> 1993). Overexpression of c-myc has been reported in a wide variety of human cancers (Nesbit <i>et al.</i> 1999). Mouse anti c-myc antibody, clone 9E10 recognizes the sequence EQKLISEEDL and may be used to detect proteins and peptides labelled with molecular tags containing this sequence (Hilpert <i>et al.</i> 2001).
Flow Cytometry	Use 10µl of the suggested working dilution to label $1x10^6$ cells in $100µl$
References	 Evan, G.I. <i>et al.</i> (1985) Isolation of monoclonal antibodies specific for human c-myc proto-oncogene product. <u>Mol Cell Biol. 5 (12): 3610-6.</u> Spandidos, D.A. <i>et al.</i> (1987) Elevated expression of the myc gene in human benign and malignant breast lesions compared to normal tissue. <u>Anticancer Res. 7 (6): 1299-304.</u> Borodina, I. <i>et al.</i> (2010) Display of wasp venom allergens on the cell surface of <i>Saccharomyces cerevisiae</i>. <u>Microb Cell Fact. 9: 74.</u> Groeger, G. <i>et al.</i> (2007) Co-operative Cdc42 and Rho signalling mediates ephrinB-

Gray, P. *et al.* (2010) Identification of a novel human MD-2 splice variant that negatively regulates Lipopolysaccharide-induced TLR4 signaling. <u>J Immunol. 184: 6359-66.</u>
 Duriseti, S. *et al.* (2010) Antagonistic anti-urokinase plasminogen activator receptor (uPAR) antibodies significantly inhibit uPAR-mediated cellular signaling and migration. <u>J</u>

Biol Chem. 285: 26878-88.

9. Tan, P.H. *et al.* (2005) Creation of tolerogenic human dendritic cells via intracellular CTLA4: a novel strategy with potential in clinical immunosuppression. <u>Blood. 106:</u> <u>2936-43.</u>

10. Wallace, S.W. *et al.* (2010) Cdc42 regulates apical junction formation in human bronchial epithelial cells through PAK4 and Par6B. <u>Mol Biol Cell. 21: 2996-3006.</u>

11. Rowshanravan, B. *et al.* (2014) RasGAP mediates neuronal survival in *Drosophila* through direct regulation of Rab5-dependent endocytosis. <u>J Cell Sci. 127: 2849-61.</u>

12. Taylor K *et al.* (2015) Nanocell targeting using engineered bispecific antibodies. <u>MAbs.</u> <u>7 (1): 53-65.</u>

13. Sharkey, A.M. *et al.* (2015) Tissue-Specific Education of Decidual NK Cells. J Immunol. 195 (7): 3026-32.

14. Frohnert, C. *et al.* (2014) Importin 7 and Nup358 promote nuclear import of the protein component of human telomerase. <u>PLoS One. 9 (2): e88887.</u>

15. Hage, N. *et al.* (2015) Improved expression and purification of the Helicobacter pylori adhesin BabA through the incorporation of a hexa-lysine tag. <u>Protein Expr Purif. 106:</u> <u>25-30.</u>

16. Mann, J.K. & Park, S. (2015) Epitope-Specific Binder Design by Yeast Surface Display. <u>Methods Mol Biol. 1319: 143-54.</u>

17. Paraskevopoulou, V. *et al.* (2019) Introduction of a C-terminal hexa-lysine tag increases thermal stability of the LacDiNac binding adhesin (LabA) exodomain from *Helicobacter pylori*. <u>Protein Expr Purif. 163: 105446.</u>

18. Lim, H.K. *et al.* (2010) Flow cytometric analysis of genetic FRET detectors containing variable substrate sequences. <u>Biotechnol Prog. 26 (6): 1765-71.</u>

19. Walker, L.M. *et al.* (2009) Efficient recovery of high-affinity antibodies from a single-chain Fab yeast display library. J Mol Biol. 389 (2): 365-75.

20. Matos, J. *et al.* (2013) Cell-cycle kinases coordinate the resolution of recombination intermediates with chromosome segregation. <u>Cell Rep. 4 (1): 76-86.</u>

21. Paraskevopoulou, V. *et al.* (2020) Structural and binding characterization of the LacdiNAc-specific adhesin (LabA; HopD) exodomain from *Helicobacter pylori*. <u>Curr Res</u> <u>Struct Biol. 15 Dec [Epub ahead of print].</u>

22. Kalusche, S. *et al.* (2020) Lactobacilli Expressing Broadly Neutralizing Nanobodies against HIV-1 as Potential Vectors for HIV-1 Prophylaxis? <u>Vaccines (Basel). 8 (4) Dec 13</u> [Epub ahead of print].

23. Hollandsworth, H.M. *et al.* (2020) Fluorophore-conjugated *Helicobacter pylori* recombinant membrane protein (HopQ) labels primary colon cancer and metastases in orthotopic mouse models by binding CEA-related cell adhesion molecules. <u>Transl Oncol.</u> <u>13 (12): 100857.</u>

24. Paraskevopoulou, V. *et al.* (2021) Structural and binding characterization of the LacdiNAc-specific adhesin (LabA; HopD) exodomain from *Helicobacter pylori*. <u>Curr Res</u> <u>Struct Biol. 3: 19-29.</u>

25. Low, S. *et al.* (2020) VHH antibody targeting the chemokine receptor CX3CR1 inhibits progression of atherosclerosis. <u>MAbs. 12 (1): 1709322.</u>

Further Reading	 Nesbit, C. <i>et al.</i> (1999) MYC oncogenes and human neoplastic <u>3004-16.</u> Krauß, N. <i>et al.</i> (2008) The structure of the anti-c-myc antibody fragment/epitope peptide complex reveals a novel binding mode chain hypervariable loops. <u>Proteins. 73: 552-65.</u> 	/ 9E10 Fab		
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.			
	Avoid repeated freezing and thawing as this may denature the an frost-free freezers is not recommended. This product is photosen protected from light.			
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/MCA2200A647 10041			
Regulatory	For research purposes only			
Related Produc	cts			
Recommended Ne	egative Controls			
MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)				
Recommended Useful Reagents				
HUMAN SEROBLOCK HUMAN SEROBLOCK				

North & South	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
	Email: antibody_sales_us@bio-rad.	com	Email: antibody_sales_uk@bio-rac	d.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 'M413263:221121'

Printed on 17 Jan 2025

© 2025 Bio-Rad Laboratories Inc | Legal | Imprint