

Datasheet: MCA1298A647

Description:	MOUSE ANTI HUMAN CD79a:Alexa Fluor® 647
Specificity:	CD79a
Other names:	MB-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	ZL7-4
Isotype:	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 <a href="https://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.

Human			
Purified IgG conjugated to Alexa Fluor® 647 - liquid			
Fluorophore	Excitation Max (nm)	Emission Max (nm)	
Alexa Fluor®647	650	665	
Antibody purified from tissue culture supernatant			
Phosphate buffered saline			
0.09% sodium azide (	NaN <sub>3</sub> )		
1% bovine serum albu	ımin		
IgG concentration 0.0	5 mg/ml		
	Purified IgG conjugate  Fluorophore  Alexa Fluor®647  Antibody purified from  Phosphate buffered sa  0.09% sodium azide (  1% bovine serum albu	Purified IgG conjugated to Alexa Fluor® 64  Fluorophore Excitation Max (nm)  Alexa Fluor®647 650  Antibody purified from tissue culture supern	

IgM complex isolated from Daudi cells.

# External Database Links

### **UniProt:**

P11912 Related reagents

#### **Entrez Gene:**

973 CD79A Related reagents

#### **Synonyms**

IGA, MB1

### **RRID**

AB 322590

## **Fusion Partners**

Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

### **Specificity**

**Mouse anti Human CD79a antibody, clone ZL7-4** recognizes the human B-cell antigen receptor complex-associated protein alpha chain, also known as MB-1 membrane glycoprotein or CD79a. clone ZL7-4 reacts with CD79a positive cells by flow cytometry and with CD79a in an ELISA specific for a fusion protein of CD79a-Fc.

Mouse anti Human CD79a antibody, clone ZL7-4 has been reported to be useful in distinguishing B-CLL from mantle cell lymphoma in flow cytometric assays (<u>Bell et al.</u> 1999).

Mouse anti Human CD79a antibody, clone ZL7-4 has been reported to be suitable for Immunohistochemistry on frozen and pre-treated paraffin sections, but does exhibit epithelial staining.

Mouse anti Human CD79a antibody, clone ZL7-4 has been reported to induce phosphorylation of syk kinase (<u>Lanham et al. 2003</u>).

### Flow Cytometry

Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells or 100µl whole blood We recommend incubation times of at least 30 minutes with this antibody.

### References

- 1. Zhang. L. *et al.* (1995) The development of anti-CD79 monoclonal antibodies for treatment of B-cell neoplastic disease. Therapeutic Immunology 2:191-202
- 2. Bell, P.B. *et al.* (1999) CD79a detected by ZL7.4 separates chronic lymphocytic leukemia from mantle cell lymphoma in the leukemic phase. Cytometry. 38 (3): 102-5.
- 3. Cragg, M.S. *et al.* (2002) The alternative transcript of CD79b is overexpressed in B-CLL and inhibits signaling for apoptosis. <u>Blood. 100: 3068-76.</u>
- 4. Lanham, S. *et al.* (2003) Differential signaling via surface IgM is associated with VH gene mutational status and CD38 expression in chronic lymphocytic leukemia. <u>Blood. 101</u> (3): 1087-93.
- 5. Allsup, D.J. *et al.* (2005) B-cell receptor translocation to lipid rafts and associated signaling differ between prognostically important subgroups of chronic lymphocytic leukemia. <u>Cancer Res. 65: 7328-37.</u>
- 6. Rahemtullah, A. et al. (2008) CD20+ T-cell lymphoma: clinicopathologic analysis of 9

cases and a review of the literature. Am J Surg Pathol. 32 (11): 1593-607.

7. Luger, D. *et al.* (2013) Expression of the B-cell receptor component CD79a on immature myeloid cells contributes to their tumor promoting effects. <u>PLoS One. 8 (10):</u> e76115.

8. Vendel,A.C. *et al* (2009) B and T lymphocyte attenuator regulates B cell receptor signaling by targeting Syk and BLNK <u>J Immunol</u>. 182: 1509-17.

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

Guarantee	12 months from date of despatch
Acknowledgements	The Alexa Fluor dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays, and are covered by pending and issued patents.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1298A647">https://www.bio-rad-antibodies.com/SDS/MCA1298A647</a> 10041
Regulatory	For research purposes only

# Related Products

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

# **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376

America

Tel: +1 800 265 7376 **Worldwide** Fax: +1 919 878 3751

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

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

 ${\bf Email: antibody\_sales\_uk@bio-rad.com}$ 

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 'M410379:221028'

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