

Datasheet: MCA911

Description:	MOUSE ANTI HUMAN CD47
Specificity:	CD47
Other names:	SIRP LIGAND
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	BRIC126
Isotype:	IgG2b
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	▪			1/10
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting (1)	▪			
Functional Assays (2)	▪			

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) **BRIC126 recognizes CD47 under non-reducing conditions, the CD47 epitope recognized is lost on reduction, see [Shahein et al.](#) for details**

(2) **This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.**

Target Species

Human

Species Cross Reactivity

Reacts with: Dog, Bovine, Sheep, Pig

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	TRIS buffered glycine
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Human erythrocytes
External Database Links	<p>UniProt: Q08722 Related reagents</p> <p>Entrez Gene: 961 CD47 Related reagents</p>
Synonyms	MER6
RRID	AB_321436
Specificity	Mouse anti human CD47 antibody, clone BRIC126 recognises the human CD47 cell surface glycoprotein, a heavily N-glycosylated 47-52 kDa molecule. CD47 is expressed on all cells and tissues so far examined, although expression is reduced on erythrocytes of the rare Rh null phenotype.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Avent, N. <i>et al.</i> (1988) Monoclonal antibodies that recognize different membrane proteins that are deficient in Rhnull human erythrocytes. One group of antibodies reacts with a variety of cells and tissues whereas the other group is erythroid-specific. Biochem J. 251 (2): 499-505. 2. Ide, K. <i>et al.</i> (2007) Role for CD47-SIRPalpha signaling in xenograft rejection by macrophages. Proc Natl Acad Sci U S A. 104 (12): 5062-6. 3. Lecchi, C. <i>et al.</i> (2008) Bovine alpha-1 acid glycoprotein can reduce the chemotaxis of bovine monocytes and modulate CD18 expression. Vet Res. 39: 50. 4. Chao, M.P. <i>et al.</i> (2011) Therapeutic antibody targeting of CD47 eliminates human acute lymphoblastic leukemia. Cancer Res. 71 (4): 1374-84. 5. Shahein, Y.E. <i>et al.</i> (2002) Molecular cloning and functional characterization of the pig homologue of integrin-associated protein (IAP/CD47). Immunology. 106: 564-76. 6. Brooke, G. <i>et al.</i> (2004) Human lymphocytes interact directly with CD47 through a novel member of the signal regulatory protein (SIRP) family. J Immunol. 173: 2562-70. 7. Wewer, C. <i>et al.</i> (2011) Transcellular migration of neutrophil granulocytes through the blood-cerebrospinal fluid barrier after infection with <i>Streptococcus suis</i>. J

[Neuroinflammation. 8: 51.](#)

8. Ticchioni, M. *et al.* (2001) Integrin-associated protein (CD47/IAP) contributes to T cell arrest on inflammatory vascular endothelium under flow. [FASEB J. 15: 341-50.](#)

9. Chao, M.P. *et al.* (2010) Anti-CD47 antibody synergizes with rituximab to promote phagocytosis and eradicate non-Hodgkin lymphoma. [Cell. 142: 699-713.](#)

10. Siddhartha, J *et al.* (2016) Methods of manipulating phagocytosis mediated by CD47. [US patent app 15/054930](#)

11. Petrova, P.S. *et al.* (2017) TTI-621 (SIRP α Fc): A CD47-Blocking Innate Immune Checkpoint Inhibitor with Broad Antitumor Activity and Minimal Erythrocyte Binding. [Clin Cancer Res. 23 \(4\): 1068-79.](#)

12. Noda, G.S. *et al.* (2020) Specificities and isotypes of erythrocytes autoantibodies in patients with warm autoimmune hemolytic anemia [Rev Cubana Hematol Inmunol Hemoter 36\(4\): e1283.](#)

13. Kosaka, A. *et al.* (2021) CD47 blockade enhances the efficacy of intratumoral STING-targeting therapy by activating phagocytes. [J Exp Med. 218 \(11\): e20200792.](#)

14. Wang, Z. *et al.* (2021) The effects of cell surface CD47 downregulation on ischaemia-reperfusion injury during pig liver transplantation. [Int J Exp Pathol. 102 \(3\): 140-147.](#)

Further Reading 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10072 available at: 10072: <https://www.bio-rad-antibodies.com/uploads/MSDS/10072.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

[FITC](#), [HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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

'M389736:210806'

Printed on 12 Aug 2022

© 2022 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)