

# Datasheet: MCA911T BATCH NUMBER 150362

Description:	MOUSE ANTI HUMAN CD47	
Specificity:	CD47	
Other names:	SIRP LIGAND	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	BRIC126	
Isotype:	lgG2b	
Quantity:	25 μg	

### **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	•			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 <u>Shahein et al.</u> for details.
- (2)This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays. Our <u>Slide-A-Lyzer® Dialysis Cassette</u> (EQU003) is recommended suitable for this purpose.

Target Species	Human		
Species Cross	Reacts with: Dog, Bovine, Sheep, Pig		
Reactivity	N.B. Antibody reactivity and working conditi		

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or

Product Form	Purified IgG - liquid		
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	TRIS buffered saline		
Preservative Stabilisers	0.09% Sodium Azide		
Approx. Protein Concentrations	IgG concentration 1 mg/ml		
Immunogen	Human erythrocytes		
External Database Links	UniProt:  Q08722 Related reagents  Entrez Gene:		
	961 CD47 Related reagents		
Synonyms	MER6		
RRID	AB_1102099		
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 <sup>6</sup> cells in 100ul.		
References	<ol> <li>Avent, N. et al. (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.</li> <li>Ide, K. et al. (2007) Role for CD47-SIRPalpha signaling in xenograft rejection by macrophages. Proc Natl Acad Sci U S A. 104 (12): 5062-6.</li> <li>Lecchi, C. et al. (2008) Bovine alpha-1 acid glycoprotein can reduce the chemotaxis of bovine monocytes and modulate CD18 expression. Vet Res. 39: 50.</li> <li>Chao, M.P. et al. (2011) Therapeutic antibody targeting of CD47 eliminates human acute lymphoblastic leukemia. Cancer Res. 71 (4): 1374-84.</li> <li>Shahein, Y.E. et al. (2002) Molecular cloning and functional characterization of the pig homologue of integrin-associated protein (IAP/CD47). Immunology. 106: 564-76.</li> <li>Brooke, G. et al. (2004) Human lymphocytes interact directly with CD47 through a nove</li> </ol>		

personal communications from the originators. Please refer to references indicated for

further information.

member of the signal regulatory protein (SIRP) family. J Immunol. 173: 2562-70.

7. Wewer, C. et al. (2011) Transcellular migration of neutrophil granulocytes through the blood-cerebrospinal fluid barrier after infection with Streptococcus suis. 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 (SIRPαFc): A CD47-Blocking Innate Immune Checkpoint Inhibitor with Broad Antitumor Activity and Minimal Erythrocyte Binding. Clin Cancer Res. 23 (4): 1068-79.

#### **Further Reading**

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

#### **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/MCA911T

10040

Regulatory

For research purposes only

### Related Products

#### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...) **RPE** 

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

Rabbit Anti Mouse IgG (STAR13...) **HRP** 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** 

**RPE** 

# **Recommended Negative Controls**

### MOUSE IgG2b NEGATIVE CONTROL (MCA691)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M369146:200529'

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