

Datasheet: MCA911T

Description:	MOUSE ANTI HUMAN CD47
Specificity:	CD47
Other names:	SIRP LIGAND
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	BRIC126
Isotype:	IgG2b
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 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. Our [Slide-A-Lyzer® Dialysis Cassette](#) (EQU003) is recommended suitable for this purpose.**

Target Species	Human
Species Cross Reactivity	Reacts with: Dog, Bovine, Sheep, Pig N.B. Antibody reactivity and working conditions may vary between species.
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	0.09% Sodium Azide

Stabilisers

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

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

1. 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.](#)
2. Campbell, I.G. *et al.* (1992) An ovarian tumor marker with homology to vaccinia virus contains an IgV-like region and multiple transmembrane domains. [Cancer Res. 52 \(19\): 5416-20.](#)
3. Brown, E. *et al.* (1990) Integrin-associated protein: a 50-kD plasma membrane antigen physically and functionally associated with integrins. [J Cell Biol. 111 \(6 Pt 1\): 2785-94.](#)
4. Lindberg, F.P. *et al.* (1993) Molecular cloning of integrin-associated protein: an immunoglobulin family member with multiple membrane-spanning domains implicated in alpha v beta 3-dependent ligand binding. [J Cell Biol. 123 \(2\): 485-96.](#)
5. 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.](#)
6. 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.](#)
7. Chao, M.P. *et al.* (2011) Therapeutic antibody targeting of CD47 eliminates human acute lymphoblastic leukemia. [Cancer Res. 71 \(4\): 1374-84.](#)
8. 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.](#)
9. Brooke, G. *et al.* (2004) Human lymphocytes interact directly with CD47 through a novel member of the signal regulatory protein (SIRP) family. [J Immunol. 173: 2562-70.](#)
10. 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.](#)
11. 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.](#)
12. Chao, M.P. *et al.* (2010) Anti-CD47 antibody synergizes with rituximab to promote phagocytosis and eradicate non-Hodgkin lymphoma. [Cell. 142: 699-713.](#)
13. Siddhartha, J *et al.* (2016) Methods of manipulating phagocytosis mediated by CD47. [US patent app 15/054930](#)

Further Reading

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

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.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation available at:
Material Safety Datasheet Documentation #10040 available at:
<https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Human Anti Mouse IgG2b (HCA038...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	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

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