

Datasheet: MCA2514A488

Description:	MOUSE ANTI HUMAN CD47:Alexa Fluor® 488		
Specificity:	CD47		
Other names:	SIRP LIGAND		
Format:	ALEXA FLUOR® 488		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	1/1A4		
Isotype:	lgG2b		
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="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			Neat - 1/10

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.

Target Species	Human			
Product Form	Purified IgG conjuga	Purified IgG conjugated to Alexa Fluor®488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	1)
	Alexa Fluor®488	495	519	
Preparation	Purified IgG prepared supernatant	d by affinity chromatog	raphy on Protein A	from tissue cultur
<b>Buffer Solution</b>	Phosphate buffered	saline		
Preservative	0.09% Sodium Azide	e (NaN <sub>3</sub> )		
Stabilisers	1% Bovine Serum	n Albumin		
Approx. Protein	IgG concentration 0.	05mg/ml		

Immunogen	Human erythrocytes.
External Database Links	UniProt: Q08722 Related reagents  Entrez Gene: 961 CD47 Related reagents
Synonyms	MER6
RRID	AB_999251
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	Mouse anti Human CD47 antibody, clone 1/1A4 recognizes human CD47, also known as integrin-associated protein, a 50kDa glycoprotein expressed on all haematopoietic cell lines, epithelial cells, endothelial cells, fibroblasts and many tumour cell lines.  CD47 is involved in several cellular processes including regulation of T cell and dendritic cell activation, regulation of neutrophil (PMN) chemotaxis, caspase-independent apoptosis, and may act as a signal transducer in the regulation of cation fluxes across cell membranes. CD47 has been identified as a ligand for the inhibitory macrophage receptor known as signal regulatory protein alpha (SIRPalpha) and as a receptor for thrombospondin-1.  Cross-linking of CD47 with clone 1/1A4 co-stimulates the proliferation of T cells (Waclavicek et al. 1993).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	1. Waclavicek, M. <i>et al.</i> (1997) T cell stimulation via CD47: agonistic and antagonistic effects of CD47 monoclonal antibody 1/1A4. <u>J Immunol. 159 (11): 5345-54.</u>
Further Reading	1. Frazier, W.A. <i>et al.</i> (1999) The thrombospondin receptor integrin-associated protein (CD47) functionally couples to heterotrimeric Gi. <u>J Biol Chem. 274 (13): 8554-60.</u>
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

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Health And Safety Information

Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2514A488

10041

Regulatory

For research purposes only

# Related Products

# **Recommended Negative Controls**

MOUSE IgG2b NEGATIVE CONTROL: Alexa Fluor® 488 (MCA691A488)

### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide Tel: +44 (0

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 'M394963:220223'

#### Printed on 02 Jan 2025

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