

Datasheet: MCA2514A488

BATCH NUMBER 160692

Description:	MOUSE ANTI HUMAN CD47:Alexa Fluor® 488
Specificity:	CD47
Other names:	SIRP LIGAND
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	1/1A4
Isotype:	IgG2b
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 www.bio-rad-antibodies.com/protocols.

	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 conjugated to Alexa Fluor®488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519
Preparation	Purified IgG prepared by affinity chromatography on Protein A from supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)		
	1%	Bovine Serum Albumin	
Approx. Protein	IgG concentration 0.05mg/ml		

Concentrations

Immunogen	Human erythrocytes.
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External Database Links

UniProt:

[Q08722](#)

[Related reagents](#)

Entrez Gene:

[961](#)

CD47

[Related reagents](#)

Synonyms	MER6
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RRID	AB_999251
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Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.
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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 ⁶ cells in 100ul.
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References	1. Waclavicek, M. <i>et al.</i> (1997) T cell stimulation via CD47: agonistic and antagonistic effects of CD47 monoclonal antibody 1/1A4. J Immunol. 159 (11): 5345-54.
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Further Reading	1. Frazier, W.A. <i>et al.</i> (1999) The thrombospondin receptor integrin-associated protein (CD47) functionally couples to heterotrimeric Gi. J Biol Chem. 274 (13): 8554-60.
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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.
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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
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2514A488 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA691A488\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M394963:220223'

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