

Datasheet: MCA2514

Description:	MOUSE ANTI HUMAN CD47
Specificity:	CD47
Other names:	SIRP LIGAND
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1/1A4
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	■			1/25 - 1/100
Immunohistology - Frozen	■			
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation	■			
Western Blotting			■	

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Human erythrocytes.

**External Database
Links**

UniProt:

[Q08722](#) [Related reagents](#)

Entrez Gene:

[961](#) CD47 [Related reagents](#)

Synonyms

MER6

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 10⁶ cells in 100ul.

**Histology Positive
Control Tissue**

Human tonsil

References

1. Waclavicek, M. *et al.* (1997) T cell stimulation via CD47: agonistic and antagonistic effects of CD47 monoclonal antibody 1/1A4. [J Immunol. 159 \(11\): 5345-54.](#)

Further Reading

1. Frazier, W.A. *et al.* (1999) The thrombospondin receptor integrin-associated protein (CD47) functionally couples to heterotrimeric Gi. [J Biol Chem. 274 \(13\): 8554-60.](#)

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. 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 #10040 available at:
10040: <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
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
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG2b (HCA038...)	FITC , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

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

Recommended Useful Reagents

[HISTAR DETECTION SYSTEM \(STAR3000A\)](#)

[HISTAR DETECTION SYSTEM \(STAR3000B\)](#)

[HISTAR DETECTION SYSTEM \(STAR3000C\)](#)

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