

## Datasheet: MCA1997GA

<b>Description:</b>	MOUSE ANTI RAT CD47
<b>Specificity:</b>	CD47
<b>Other names:</b>	OX41 LIGAND, SIRP LIGAND
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-101
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/100
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Rat thymocytes.
<b>External Database Links</b>	<b>UniProt:</b>

**Entrez Gene:**

[29364](#) Cd47 [Related reagents](#)

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**Specificity**

**Mouse anti Rat CD47 antibody, clone OX-101** recognizes the rat homologue of human CD47, also known as integrin associated protein (IAP). Rat CD47 is a 303 amino acid  $\gamma$ 33 kDa multi pass transmembrane glycoprotein bearing a single [V-type Ig-like](#) domain and has been identified as the ligand for the rat signal regulatory protein, SIRP ([Vernon-Wilson et al. 2000](#)). Rat CD47 is expressed primarily by lymphocytes and macrophages but has also been detected at high levels on brain endothelial cells.

Mouse anti Rat CD47 antibody, clone OX-101 has been reported to block the interaction of CD47 and SIRP ([Vernon-Wilson et al. 2000](#)).

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul.

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**References**

1. Vernon-Wilson, E.F. *et al.* (2000) CD47 is a ligand for rat macrophage membrane signal regulatory protein SIRP (OX41) and human SIRPalpha 1. [Eur J Immunol. 30 \(8\): 2130-7.](#)
2. de Vries, H.E. *et al.* (2002) Signal-regulatory protein alpha-CD47 interactions are required for the transmigration of monocytes across cerebral endothelium. [J Immunol. 168 \(11\): 5832-9.](#)
3. Sick, E. *et al.* (2009) Activation of CD47 receptors causes histamine secretion from mast cells. [Cell Mol Life Sci. 66: 1271-82.](#)
4. Barrès, C. *et al.* (2010) Galectin-5 is bound onto the surface of rat reticulocyte exosomes and modulates vesicle uptake by macrophages. [Blood. 115: 696-705.](#)
5. Kurihara H *et al.* (2010) SIRP-alpha-CD47 system functions as an intercellular signal in the renal glomerulus. [Am J Physiol Renal Physiol. 299 \(3\): F517-27.](#)

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**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.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety Information**

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

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**Regulatory**

For research purposes only

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## 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...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight®800</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Human Anti Mouse IgG1 (HCA036...)	<a href="#">HRP</a>

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto:antibody_sales_uk@bio-rad.com)

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