

Datasheet: MCA1997

**BATCH NUMBER 1707**

<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>	0.25 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	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			

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>	<p><b>UniProt:</b>  <a href="#">P97829</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">29364</a> Cd47    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2074952
<b>Specificity</b>	<p><b>Mouse anti Rat CD47 antibody, clone OX-101</b> recognizes the rat homologue of human CD47, also known as integrin associated protein (IAP). Rat CD47 is a 303 amino acid <math>\gamma</math>33 kDa multi pass transmembrane glycoprotein bearing a single <a href="#">V-type Ig-like</a> domain and has been identified as the ligand for the rat signal regulatory protein, SIRP (<a href="#">Vernon-Wilson et al. 2000</a>). Rat CD47 is expressed primarily by lymphocytes and macrophages but has also been detected at high levels on brain endothelial cells.</p> <p>Mouse anti Rat CD47 antibody, clone OX-101 has been reported to block the interaction of CD47 and SIRP (<a href="#">Vernon-Wilson et al. 2000</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Vernon-Wilson, E.F. <i>et al.</i> (2000) CD47 is a ligand for rat macrophage membrane signal regulatory protein SIRP (OX41) and human SIRPalpha 1. <a href="#">Eur J Immunol. 30 (8): 2130-7.</a></li> <li>de Vries, H.E. <i>et al.</i> (2002) Signal-regulatory protein alpha-CD47 interactions are required for the transmigration of monocytes across cerebral endothelium. <a href="#">J Immunol. 168 (11): 5832-9.</a></li> <li>Sick, E. <i>et al.</i> (2009) Activation of CD47 receptors causes histamine secretion from mast cells. <a href="#">Cell Mol Life Sci. 66: 1271-82.</a></li> <li>Barrès, C. <i>et al.</i> (2010) Galectin-5 is bound onto the surface of rat reticulocyte exosomes and modulates vesicle uptake by macrophages. <a href="#">Blood. 115: 696-705.</a></li> <li>Kurihara H <i>et al.</i> (2010) SIRP-alpha-CD47 system functions as an intercellular signal in the renal glomerulus. <a href="#">Am J Physiol Renal Physiol. 299 (3): F517-27.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1997">https://www.bio-rad-antibodies.com/SDS/MCA1997</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://bio-rad-antibodies.com/datasheets)  
'M366056:200529'

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