## Datasheet: MCA1997 BATCH NUMBER 1707

Description:	MOUSE ANTI RAT CD47
Specificity:	CD47
Other names:	OX41 LIGAND, SIRP LIGAND
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-101
lsotype:	lgG1
Quantity:	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 <u>www.bio-</u>					
	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.					
Target Species	Rat					
Product Form	Purified IgG - liquid					
Preparation	Purified IgG prepared by affinity chromatography on Protein G fro supernatant			n tissue culture		
Buffer Solution	Phosphate buffered saline					
Preservative Stabilisers	0.09% Sodium Azide					

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Rat thymocytes.
External Database Links	UniProt: <u>P97829</u> <u>Related reagents</u> Entrez Gene:
	29364 Cd47 Related reagents
RRID	AB_2074952
Specificity	<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 $\bar{y}$ 33 kDa multi pass transmembrane glycoprotein bearing a single <u>V-type Ig-like</u> domain and has been identified as the ligand for the rat signal regulatory protein, SIRP ( <u>Vernon-Wilson <i>et al.</i> 2000</u> ). 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 ( <u>Vernon-Wilson <i>et al.</i> 2000</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <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. <u>Eur J Immunol. 30 (8): 2130-7.</u></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. <u>J Immunol. 168 (11): 5832-9.</u></li> <li>Sick, E. <i>et al.</i> (2009) Activation of CD47 receptors causes histamine secretion from mast cells. <u>Cell Mol Life Sci. 66: 1271-82.</u></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. <u>Blood. 115: 696-705.</u></li> <li>Kurihara H <i>et al.</i> (2010) SIRP-alpha-CD47 system functions as an intercellular signal in the renal glomerulus. <u>Am J Physiol Renal Physiol. 299 (3): F517-27.</u></li> </ol>
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.

Guarantee 12 months from date of despatch			
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1997 10040		
Regulatory	Regulatory For research purposes only		
Related Produce Recommended So	cts econdary Antibodies		
Rabbit Anti Mouse Id	aG (STAR12) RPF		

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

MOUSE IgG1 NEGATIVE CONTROL (MCA1209)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		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 'M366056:200529'

## Printed on 19 Jan 2024

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