

Datasheet: MCA1997

Description:	MOUSE ANTI RAT CD47
Specificity:	CD47
Other names:	OX41 LIGAND, SIRP LIGAND
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-101
Isotype:	IgG1
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 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.

Target Species	Rat
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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Rat thymocytes.

**External Database
Links**

UniProt:

[P97829](#) [Related reagents](#)

Entrez Gene:

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

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 γ 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](#)).

Flow Cytometry

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

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.](#)

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.

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](#)

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...) [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 IgG1 (HCA036...) [HRP](#)

Recommended Negative Controls

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

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