

Datasheet: MCA372G

BATCH NUMBER 158425

Description:	MOUSE ANTI RAT CD4 (DOMAIN 1)
Specificity:	CD4 (DOMAIN 1)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-38
Isotype:	IgG2a
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	▪			1/100 - 1/200
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. Suggested working dilutions are given as a guide only. 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
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	MLR generated rat T cells.
External Database Links	<p>UniProt: P05540 Related reagents</p> <p>Entrez Gene: 24932 Cd4 Related reagents</p>
RRID	AB_322838
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>Mouse anti Rat CD4 (Domain 1) antibody, clone OX-38 recognizes the rat CD4 cell surface antigen, also known as W3/25 antigen or T-cell surface antigen T4/Leu-3. CD4 is a 430 amino acid ~55 kDa single pass type I transmembrane glycoprotein expressed by T helper cells, monocytes and macrophages.</p> <p>Clone OX-38 competes for binding with Mouse anti Rat CD4 antibody, clone W3/25 (MCA55R).</p> <p>Mouse anti Rat CD4 (Domain 1) antibody, clone OX-38 has been utilized successfully for the <i>in vitro</i> depletion of T helper cells (Pusic et al. 2015).</p>
References	<ol style="list-style-type: none"> 1. Jefferies, W.A. <i>et al.</i> (1985) Authentic T helper CD4 (W3/25) antigen on rat peritoneal macrophages. J Exp Med. 162 (1): 117-27. 2. Barclay, A.N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. Immunology. 42 (4): 593-600. 3. Thomas, M.L. & Green, J.R. (1983) Molecular nature of the W3/25 and MRC OX-8 marker antigens for rat T lymphocytes: comparisons with mouse and human antigens. Eur J Immunol. 13 (10): 855-8. 4. Hall, B.M. <i>et al.</i> (1998) Anti-CD4 monoclonal antibody-induced tolerance to MHC-incompatible cardiac allografts maintained by CD4+ suppressor T cells that are not dependent upon IL-4. J Immunol. 161 (10): 5147-56. 5. Kitazawa, Y.<i>et al.</i> (2015) A novel multicolor immunostaining method using ethynyl deoxyuridine for analysis of <i>in situ</i> immunoproliferative response. Histochem Cell Biol. 144 (3): 195-208. 6. Pusic, A.D. <i>et al.</i> (2015) Spreading depression transiently disrupts myelin via interferon-gamma signaling. Exp Neurol. 264: 43-54. 7. Ueta, H. <i>et al.</i> (2018) Single blood transfusion induces the production of donor-specific alloantibodies and regulatory T cells mainly in the spleen. Int Immunol. 30 (2): 53-67.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for

short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA372G 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
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...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA1210\)](#)

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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://www.bio-rad-antibodies.com/datasheets)
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