

Datasheet: MCA372G

BATCH NUMBER 1602

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 from slice cultures in studies looking at myelin loss in multiple sclerosis, the observed disruption being abrogated in these experimental conditions by T-cell depletion (Pusic <i>et al.</i> 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 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/MCA372G 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	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 (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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