

Datasheet: MCA372XZ

Description:	MOUSE ANTI RAT CD4 (DOMAIN 1):Preservative Free
Specificity:	CD4 (DOMAIN 1)
Format:	Preservative Free
Product Type:	Monoclonal Antibody
Clone:	OX-38
Isotype:	IgG2a
Quantity:	1 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	None Present
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	MLR generated rat T cells.
External Database	UniProt:

Links

[P05540](#) [Related reagents](#)

Entrez Gene:

[24932](#) Cd4 [Related reagents](#)

Fusion Partners

Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.

Specificity

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.

Clone OX-38 competes for binding with Mouse anti Rat CD4 antibody, clone W3/25 ([MCA55R](#)).

Mouse anti Rat CD4 (Domain 1) antibody, clone OX-38 has been utilized successfully for the *in vitro* 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 et al. 2015](#)).

References

1. Jefferies, W.A. *et al.* (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. *et al.* (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.*et al.* (2015) A novel multicolor immunostaining method using ethynyl deoxyuridine for analysis of *in situ* immunoproliferative response. [Histochem Cell Biol. 144 \(3\): 195-208.](#)
6. Pusic, A.D. *et al.* (2015) Spreading depression transiently disrupts myelin via interferon-gamma signaling. [Exp Neurol. 264: 43-54.](#)
7. Ueta, H. *et al.* (2018) Single blood transfusion induces the production of donor-specific alloantibodies and regulatory T-cells mainly in the spleen. [Int Immunol. Jan 18 \[Epub ahead of print\].](#)

Storage

Store at -20°C only.

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 #10162 available at: 10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.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
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
Human Anti Mouse IgG2a (HCA037...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Preservative Free \(MCA1210XZ\)](#)

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