

Datasheet: MCA589R

Description:	MOUSE ANTI RAT CD45
Specificity:	CD45
Other names:	LCA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-29
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	■			1/10 - 1/50
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 from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	L-CA (CD45)

**External Database
Links**

UniProt:

[P04157](#) [Related reagents](#)

Entrez Gene:

[24699](#) Ptprc [Related reagents](#)

Fusion Partners	Fusion of cells from NSO mouse myeloma line with spleen cells from BALB/c mice immunised with purified LCA.
Specificity	Mouse anti Rat CD45 antibody, clone OX-29 recognizes rat CD45, also known as Receptor-type tyrosine-protein phosphatase C, Leukocyte common antigen (LCA) or T200, expressed on all rat leukocytes. CD45 is a single pass, type I transmembrane glycoprotein of ~180-240kDa depending on the isoform and degree of glycosylation. Rat CD45 contains two intracellular tyrosine-protein phosphatase domains and at least two extracellular fibronectin type-III domains (Uniprot Acc no: P04157), although the existence of a third similar domain has previously been proposed (Symons et al. 1999). Mouse anti Rat CD45 antibody, clone OX-29 has been reported as recognizing a monomorphic determinant present on all allogenic forms of the rat CD45 antigen (Symons and Barclay 2000). Epitope mapping further indicates that the OX-29 clone binds to a determinant located within the membrane distal two domains of CD45 (Symons, et al. 1999).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Woollett, G.R. <i>et al.</i> (1985) Molecular and antigenic heterogeneity of the rat leukocyte-common antigen from thymocytes and T and B lymphocytes. Eur J Immunol. 15 (2): 168-73. 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. Symons, A. <i>et al.</i> (1999) Domain organization of the extracellular region of CD45. Protein Eng. 12 (10): 885-92. 4. Zhou, L. <i>et al.</i> (2014) Purification of endothelial cells from rodent brain by immunopanning. Cold Spring Harb Protoc. 2014 (1): 65-77. 5. Barres, B.A. (2014) Designing and troubleshooting immunopanning protocols for purifying neural cells. Cold Spring Harb Protoc. 2014 (12): 1342-7.
Storage	Store at +4°C for one month or at -20°C for longer. 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
Human Anti Mouse IgG2a (HCA037...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	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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