

## Datasheet: MCA1029GA

<b>Description:</b>	MOUSE ANTI RAT OX-62
<b>Specificity:</b>	OX-62
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-62
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## Product Details

**RRID** AB\_2128734

**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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			

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 A 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** Density gradient enriched PVG rat thoracic duct dendritic cells.

**External Database  
Links**

**UniProt:**

[O88341](#)   [Related reagents](#)

**Fusion Partners**

Spleen cells of BALB/c mice were fused with cells of the mouse NS0 myeloma cell line.

**Specificity**

**Mouse anti Rat OX-62 antibody, clone OX-62** recognizes the OX-62 antigen, also known as rat alpha E2 integrin, an 1150 amino acid, ~130 kDa single pass type I transmembrane protein expressed by intestinal dendritic cells, dendritic epidermal T cells, intraepithelial lymphocytes in the small intestine and by cells of dendritic morphology in lymphoid organs, at sites where gamma delta T cells are present.

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

**References**

1. Brenan, M. & Puklavec, M. (1992) The MRC OX-62 antigen: a useful marker in the purification of rat veiled cells with the biochemical properties of an integrin. [J Exp Med. 175 \(6\): 1457-65.](#)
2. Brenan, M. & Rees, D.J. (1997) Sequence analysis of rat integrin alpha E1 and alpha E2 subunits: tissue expression reveals phenotypic similarities between intraepithelial lymphocytes and dendritic cells in lymph. [Eur J Immunol. 27 \(11\): 3070-9.](#)
3. Kostulas, N. *et al.* (2002) Dendritic cells are present in ischemic brain after permanent middle cerebral artery occlusion in the rat. [Stroke. 33 \(4\): 1129-34.](#)
4. Rival, C. *et al.* (2006) Identification of a dendritic cell population in normal testis and in chronically inflamed testis of rats with autoimmune orchitis. [Cell Tissue Res. 324 \(2\): 311-8.](#)
5. Tsuchiya, T. *et al.* (2002) Dendritic cell involvement in pulmonary granuloma formation elicited by bacillus calmette-guérin in rats. [Am J Respir Crit Care Med. 165 \(12\): 1640-6.](#)
6. Zilka, N. *et al.* (2009) Human misfolded truncated tau protein promotes activation of microglia and leukocyte infiltration in the transgenic rat model of tauopathy. [J Neuroimmunol. 209 \(1-2\): 16-25.](#)
7. Schwartzkopff, J. *et al.* (2010) NK cell depletion delays corneal allograft rejection in baby rats. [Mol Vis. 16: 1928-35.](#)
8. Baca Jones, C.C. *et al.* (2009) Rat cytomegalovirus infection depletes MHC II in bone marrow derived dendritic cells. [Virology. 388: 78-90.](#)
9. Zhou, Y.J. *et al.* (2010) The role of the lactadherin in promoting intestinal DCs development *in vivo* and *in vitro*. [Clin Dev Immunol. 2010: 357541.](#)
10. Aiello, S. *et al.* (2000) Thymic Dendritic Cells Express Inducible Nitric Oxide Synthase and Generate Nitric Oxide in Response to Self- and Alloantigens [J Immunol. 164: 4649-58.](#)
11. Camelo, S. *et al.* (2003) Local retention of soluble antigen by potential antigen-presenting cells in the anterior segment of the eye. [Invest Ophthalmol Vis Sci. 44: 5212-9.](#)
12. Camelo, S. *et al.* (2004) The distribution of antigen in lymphoid tissues following its injection into the anterior chamber of the rat eye. [J Immunol. 172: 5388-95.](#)
13. Henry, F. *et al.* (1999) Antigen-presenting cells that phagocytose apoptotic tumor-derived cells are potent tumor vaccines. [Cancer Res. 59: 3329-32.](#)
14. Liu, L. *et al.* (1998) Dendritic cell heterogeneity *in vivo*: two functionally different dendritic cell populations in rat intestinal lymph can be distinguished by CD4 expression. [J Immunol. 161: 1146-55.](#)
15. O'Sullivan, N.L. *et al.* (2001) Lymphocyte lineages at mucosal effector sites: rat salivary glands. [J Immunol. 166: 5522-9.](#)
16. Penttila, I.A. *et al.* (2003) Maternal milk regulation of cell infiltration and interleukin 18 in the intestine of suckling rat pups. [Gut. 52: 1579-86.](#)
17. Stephens, L.A. *et al.* (2004) Phenotypic characterization of regulatory CD4+CD25+ T cells in rats. [Int Immunol. 16: 365-75.](#)
18. Sugawara, I. *et al.* (2004) Pathological and immunological profiles of rat tuberculosis. [Int J Exp Pathol. 85: 125-34.](#)

19. Tiurbe, G. *et al.* (2009) Inhibitory effects of rat bone marrow-derived dendritic cells on naïve and alloantigen-specific CD4+ T cells: a comparison between dendritic cells generated with GM-CSF plus IL-4 and dendritic cells generated with GM-CSF plus IL-10. [BMC Res Notes. 2: 12.](#)
20. Tsuchiya, T. *et al.* (2002) Dendritic cell involvement in pulmonary granuloma formation elicited by bacillus calmette-guérin in rats. [Am J Respir Crit Care Med. 165: 1640-6.](#)
21. Stojić-Vukanić, Z. *et al.* (2016) Estradiol enhances capacity of TLR-matured splenic dendritic cells to polarize CD4+ lymphocytes into IL-17/GM-CSF-producing cells *in vitro*. [Int Immunopharmacol. 40: 244-253.](#)
22. Varas, A. *et al.* (1998) Interleukin-7 influences the development of thymic dendritic cells. [Blood. 92: 93-100.](#)
23. Bufan, B. *et al.* (2015) Aging Impairs Endocytic Capacity Of Splenic Dendritic Cells From Dark Agouti Rats And Alters Their Response To TLR4 Stimulation [Acta Veterinaria. Volume 65, Issue 1, Pages 30–55.](#)
24. Syrjälä, S. *et al.* (2015) Donor Heart Treatment With COMP-Ang1 Limits Ischemia-Reperfusion Injury and Rejection of Cardiac Allografts. [Am J Transplant. 15 \(8\): 2075-84.](#)
25. Palin, N.K. *et al.* (2017) Activin inhibition limits early innate immune response in rat kidney allografts-a pilot study. [Transpl Int. 30 \(1\): 96-107.](#)
26. Raissadati, A. *et al.* (2017) Vascular Endothelial Growth Factor-B Overexpressing Hearts Are Not Protected From Transplant-Associated Ischemia-Reperfusion Injury. [Exp Clin Transplant. 15 \(2\): 203-12.](#)

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**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.

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**Guarantee**

18 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#), [DyLight®800](#), [FITC](#), [HRP](#)

### Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA1209)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

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