

## Datasheet: MCA49P

**BATCH NUMBER 168153**

<b>Description:</b>	MOUSE ANTI RAT KAPPA LIGHT CHAIN:HRP
<b>Specificity:</b>	KAPPA LIGHT CHAIN (IgKa PREFERENCE)
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-12
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.5 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/500 - 1/1000
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.

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.0095% MIT
<b>Approx. Protein</b>	IgG concentration 1.0 mg/ml

## Concentrations

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**Immunogen** F(ab')<sub>2</sub> fragment of rat IgG.

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## External Database Links

### UniProt:

[P01836](#) [Related reagents](#)

[P01835](#) [Related reagents](#)

### Entrez Gene:

[500180](#) LOC500180 [Related reagents](#)

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**RRID** AB\_567002

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**Fusion Partners** Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

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**Specificity** **Mouse anti Rat Kappa Light Chain antibody, clone OX-12** recognizes rat kappa chains, showing a marked preference for binding to the Igk<sup>a</sup> allotype which is present in AGUS, AO, AUG, BN, LEW, LOU, PVG and WAG strains but not in ACI, DA, F344, MSU or SHR rat strains.

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## References

1. Hunt, S.V. & Fowler, M.H. (1981) A repopulation assay for B and T lymphocyte stem cells employing radiation chimaeras. [Cell Tissue Kinet. 14 \(4\): 445-64.](#)
2. Bukovský, A. *et al.* (1984) Association of some cell surface antigens of lymphoid cells and cell surface differentiation antigens with early rat pregnancy. [Immunology. 52 \(4\): 631-40.](#)
3. Dean, B.M. *et al.* (1985) Pre-diabetes in the spontaneously diabetic BB/E rat: lymphocyte subpopulations in the pancreatic infiltrate and expression of rat MHC class II molecules in endocrine cells. [Diabetologia. 28 \(7\): 464-6.](#)
4. Hanenberg, H. *et al.* (1989) Macrophage infiltration precedes and is a prerequisite for lymphocytic insulinitis in pancreatic islets of pre-diabetic BB rats. [Diabetologia. 32 \(2\): 126-34.](#)
5. Sharpe, M.J. *et al.* (1991) Somatic hypermutation of immunoglobulin kappa may depend on sequences 3' of C kappa and occurs on passenger transgenes. [EMBO J. 10 \(8\): 2139-45.](#)
6. Lozano, F. *et al.* (1993) Affinity maturation leads to differential expression of multiple copies of a kappa light-chain transgene. [Nature. 363 \(6426\): 271-3.](#)
7. McWilliam, A.S. *et al.* (1996) Dendritic cells are recruited into the airway epithelium during the inflammatory response to a broad spectrum of stimuli. [J Exp Med. 184 \(6\): 2429-32.](#)
8. Gehrs, B.C. *et al.* (1997) Alterations in the developing immune system of the F344 rat after perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin: II. Effects on the pup and the adult. [Toxicology. 122 \(3\): 229-40.](#)
9. Penny, M.J. *et al.* (1997) Role of T cells in the mediation of Heymann nephritis. ii. Identification of Th1 and cytotoxic cells in glomeruli. [Kidney Int. 51 \(4\): 1059-68.](#)
10. Cisternas, P.A. & Armati, P.J. (2000) Immune system cell markers in the northern brown bandicoot, *Isodon macrourus*. [Dev Comp Immunol. 24 \(8\): 771-82.](#)

11. Balogh, P. *et al.* (2002) Simultaneous blockade of Fc gamma receptors and indirect labeling of mouse lymphocytes by the selective detection of allotype-restricted epitopes on the kappa chain of rat monoclonal antibodies. [Cytometry. 47 \(2\): 107-10.](#)
12. Pérez-cano, F.J. *et al.* (2007) Phenotypic and functional characteristics of rat spleen lymphocytes during suckling. [Dev Comp Immunol. 31 \(12\): 1264-77.](#)
13. Emara, A.M. & Draz, E.I. (2007) Immunotoxicological study of one of the most common over-the-counter pyrethroid insecticide products in Egypt. [Inhal Toxicol. 19 \(12\): 997-1009.](#)
14. Pabst, R. *et al.* (2009) TLR2/6 stimulation of the rat lung: effects on lymphocyte subsets, natural killer cells and dendritic cells in different parts of the air-conducting compartments and at different ages. [Immunology. 126 \(1\): 132-9.](#)
15. McCormack, E. *et al.* (2010) Lentinan: hematopoietic, immunological, and efficacy studies in a syngeneic model of acute myeloid leukemia. [Nutr Cancer. 62 \(5\): 574-83.](#)
16. Cakała-Jakimowicz, M. & Puzianowska-Kuznicka, M. (2022) Towards Understanding the Lymph Node Response to Skin Infection with Saprophytic *Staphylococcus epidermidis*. [Biomedicines. 10 \(5\): 1021](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20479 available at: <https://www.bio-rad-antibodies.com/SDS/MCA49P>  
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**Regulatory** For research purposes only

## Related Products

### Recommended Useful Reagents

[AbGUARD® HRP STABILIZER PLUS \(BUF052A\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052B\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052C\)](#)

[TMB CORE \(BUF056A\)](#)

[TMB CORE+ \(BUF062A\)](#)

[TMB SIGNAL+ \(BUF054A\)](#)

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