

Datasheet: MCA02R

Description:	MOUSE ANTI MOUSE CD90
Specificity:	CD90
Other names:	THY1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	F7D5
Isotype:	IgM
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 - 1/25
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	
Cytotoxic Assays	■			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	IgM fraction - liquid
Preparation	IgM fraction prepared by ammonium sulphate precipitation
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgM concentration 1.0 mg/ml

External Database Links

UniProt:

[P01831](#)

[Related reagents](#)

Entrez Gene:

Synonyms	Thy-1
Fusion Partners	Spleen cells from immunised AKR mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	Mouse anti Mouse CD90 antibody, clone F7D5 recognizes the mouse Thy1.2 alloantigen, also known as CD90.2, which is expressed by thymocytes and peripheral T lymphocytes. Clone F7D5 reacts with Thy1.2 mice such as CBA and BALB/C, but not with Thy1.1 mice eg. AKR and FUB. The antibody is particularly useful for removal of T lymphocytes from cell populations by complement mediated cytotoxicity (Lake et al. 1979). Mouse anti Mouse CD90 antibody, clone F7D5 is routinely tested in flow cytometry using mouse thymocytes.
References	1. Lake, P. <i>et al.</i> (1979) Production and characterization of cytotoxic Thy-1 antibody-secreting hybrid cell lines. Detection of T cell subsets. Eur J Immunol. 9 (11): 875-86. 2. Yoshida, K. <i>et al.</i> (2002) Evidence for shared recognition of a peptide ligand by a diverse panel of non-obese diabetic mice-derived, islet-specific, diabetogenic T cell clones. Int Immunol. 14 (12): 1439-47. 3. de Vries-van der Zwan, A. <i>et al.</i> (1997) Specific tolerance induction and transplantation: a single-day protocol. Blood. 89(7):2596-2601 4. Winzeler, A.M. <i>et al.</i> (2011) The lipid sulfatide is a novel myelin-associated inhibitor of CNS axon outgrowth. J Neurosci. 31: 6481-92. 5. Unterlauff, J.D. <i>et al.</i> (2014) Enhanced survival of retinal ganglion cells is mediated by Müller glial cell-derived PEDF. Exp Eye Res. pii: S0014-4835(14)00218-8. 6. Brown, R.L. <i>et al.</i> (2015) TRPM3 Expression in Mouse Retina. PLoS One. 10: e0117615. 7. Hanafusa, T. <i>et al.</i> (1988) Induction of insulinitis by adoptive transfer with L3T4+Lyt2-T-lymphocytes in T-lymphocyte-depleted NOD mice. Diabetes. 37: 204-8. 8. Billiau, A.D. <i>et al.</i> (2003) Transient expansion of Mac1+Ly6-G+Ly6-C+ early myeloid cells with suppressor activity in spleens of murine radiation marrow chimeras: possible implications for the graft-versus-host and graft-versus-leukemia reactivity of donor lymphocyte infusions. Blood. 102: 740-8. 9. Raeber, A.J. <i>et al.</i> (1999) PrP-dependent association of prions with splenic but not circulating lymphocytes of scrapie-infected mice. EMBO J. 18: 2702-6. 10. Wang, X. <i>et al.</i> (2001) Functional soluble CD100/Sema4D released from activated lymphocytes: possible role in normal and pathologic immune responses Blood. 2001 Jun 1;97(3): 3498-504. 11. Billiau, A.D. <i>et al.</i> (2002) Crucial role of timing of donor lymphocyte infusion in generating dissociated graft-versus-host and graft-versus-leukemia responses in mice receiving allogeneic bone marrow transplants. Blood. 100 (5): 1894-902. 12. Ishikawa, N. <i>et al.</i> (1998) Early cytokine responses during intestinal parasitic infections. Immunology. 93 (2): 257-63. 13. Ishigaki, H. <i>et al.</i> (2006) Preparation and functional analysis of tumor-infiltrating stroma cells using bone marrow chimera mice. Microbiol Immunol. 50 (8): 655-62. 14. Logan, G.J. <i>et al.</i> (2004) CD4 expression on EL4 cells as an epiphenomenon of retroviral transduction and selection. Immunol Cell Biol. 82 (2): 132-5. 15. Gobin, V. <i>et al.</i> (2013) Fluoxetine reduces murine graft-versus-host disease by induction of T cell immunosuppression. J Neuroimmune Pharmacol. 8 (4): 934-43. 16. van Pel, M. <i>et al.</i> (2003) Towards a myeloablative regimen with clinical potential: I. Treosulfan conditioning and bone marrow transplantation allow induction of donor-specific tolerance for skin grafts across full MHC barriers. Bone Marrow Transplant. 32 (1): 15-22.

17. Oosterwegel, M.A. *et al.* (1999) The role of CTLA-4 in regulating Th2 differentiation. [J Immunol. 163 \(5\): 2634-9.](#)
18. Vadivelu, S. *et al.* (2015) NG2+ Progenitors Derived From Embryonic Stem Cells Penetrate Glial Scar and Promote Axonal Outgrowth Into White Matter After Spinal Cord Injury. [Stem Cells Transl Med. pii: sctm.2014-0107.](#)
19. Wang, Y.L. *et al.* (2015) Electrospun and woven silk fibroin/poly(lactic-co-glycolic acid) nerve guidance conduits for repairing peripheral nerve injury. [Neural Regen Res. 10 \(10\): 1635-42.](#)
20. Liu, X. *et al.* (2017) Thy-1 interaction with Fas in lipid rafts regulates fibroblast apoptosis and lung injury resolution. [Lab Invest. \(3\): 256-67.](#)
21. Naaldijk, Y. *et al.* (2016) Effect of systemic transplantation of bone marrow-derived mesenchymal stem cells on neuropathology markers in APP/PS1 Alzheimer mice. [Neuropathol Appl Neurobiol. Feb 26. \[Epub ahead of print\]](#)
22. Bernard-Marissal, N. *et al.* (2015) Dysfunction in endoplasmic reticulum-mitochondria crosstalk underlies SIGMAR1 loss of function mediated motor neuron degeneration. [Brain. 138 \(Pt 4\): 875-90.](#)
23. Takahama, S. *et al.* (2017) Retinal Astrocytes and GABAergic Wide-Field Amacrine Cells Express PDGFR α : Connection to Retinal Ganglion Cell Neuroprotection by PDGF-AA. [Invest Ophthalmol Vis Sci. 58 \(11\): 4703-11.](#)

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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Shelf Life	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 IgM (STAR86...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgM (STAR138...)	Alk. Phos.
Human Anti Mouse IgM (HCA040...)	FITC , HRP

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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