Datasheet: MCA772A700

Description:	MOUSE ANTI RAT CD3:Alexa Fluor® 700
Specificity:	CD3
Format:	ALEXA FLUOR® 700
Product Type:	Monoclonal Antibody
Clone:	1F4
Isotype:	IgM
Quantity:	100 TESTS/1ml

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	▪			Neat

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 IgM conjugated to Alexa Fluor® 700 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®700	702	723

Preparation

Purified IgM prepared by ammonium sulphate precipitation from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgM concentration 0.05 mg/ml

Immunogen

F344 rat T cells stimulated with PMA (TPA) and calcium ionophore

External Database Links

UniProt:

P19377 Related reagents
Q64159 Related reagents

Entrez Gene:

25710	Cd3d	Related reagents
300678	Cd3g	Related reagents

Synonyms	T3d
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the P3-X63-Ag8.653 mouse myeloma cell line.
Specificity	**Mouse anti Rat CD3 antibody, clone 1F4** recognizes rat CD3, a ~25 kDa antigen which is found on rat T-cells. Mouse anti Rat CD3, clone 1F4 does not react with rat B cells. In immunohistology it stains rat thymus tissues strongly in the medulla and weakly in the cortex. Functionally the addition of the antibody to a culture of rat T cells induces the proliferation of T-cells in the presence of PMA.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Tanaka, T. *et al.* (1989) Characterization of a CD3-like rat T cell surface antigen recognized by a monoclonal antibody. J Immunol. 142 (8): 2791-5. 2. Nicolls, M.G. *et al*. (1992) Induction of long-term specific tolerance to allografts in rats by therapy with an anti-CD3-like monoclonal antibody. Transplantation 55: 459-68. 3. McKechnie NM *et al.* (1997) Immunization with the cross-reactive antigens Ov39 from *Onchocerca volvulus* and hr44 from human retinal tissue induces ocular pathology and activates retinal microglia. J Infect Dis. 176 (5): 1334-43. 4. Lohwasser, C. *et al.* (2009) Role of the receptor for advanced glycation end products in hepatic fibrosis. World J Gastroenterol. 15: 5789-98. 5. Beck, K.D. *et al* (2010) Quantitative analysis of cellular inflammation after traumatic spinal cord injury: evidence for a multiphasic inflammatory response in the acute to chronic environment. Brain. 133: 433-47. 6. Candolfi, M. *et al.* (2007) Intracranial glioblastoma models in preclinical neuro-oncology: neuropathological characterization and tumor progression. J Neurooncol. 85: 133-48. 7. Sanchez-Guajardo, V. *et al.* (2010) Microglia acquire distinct activation profiles depending on the degree of alpha-synuclein neuropathology in a rAAV based model of Parkinson's disease. PLoS One. 5: e8784. 8. Echeverry, S. *et al.* (2011) Peripheral Nerve Injury Alters Blood-Spinal Cord Barrier Functional and Molecular Integrity through a Selective Inflammatory Pathway. J Neurosci. 31: 10819-28. 9. Takahashi Y *et al.* (2016) Rituximab protects podocytes and exerts anti-proteinuric effects in rat adriamycin-induced nephropathy independent of B-lymphocytes. Nephrology (Carlton). Feb 2. [Epub ahead of print] 10. Sun, J. *et al.* (2017) Pentapeptide PLNPK ameliorates adjuvant arthritis and inhibits T cell activation by suppressing Lck and PI3K activities Int J Clin Exp Pathol 10(5): 5252-62.
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. This product is photosensitive and should be protected from light. 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.
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Regulatory	For research purposes only

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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