Datasheet: DC034

BATCH NUMBER 154470

Description:	RAT ANTI MOUSE CD4:FITC/CD8:RPE
Specificity:	CD4/CD8
Format:	FITC/RPE
Product Type:	Dual Color Reagent
Clone:	YTS191.1 / KT15
Isotype:	Cocktail
Quantity:	100 TESTS

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.

Antibody Isotypes

FITC reagent: IgG2b (RAT)
RPE reagent: IgG2a (RAT)

Target Species

Mouse

Product Form

Dual Colour combination consisting of FITC conjugated and RPE conjugated monoclonal antibodies mixed in optimal ratio - lyophilised.

Reconstitution

Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525
RPE 488nm laser	496	578
RPE 561nm laser	546	578

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
External Database Links	**UniProt:** P06332 Related reagents P01731 Related reagents P10300 Related reagents **Entrez Gene:** 12504 Cd4 Related reagents 12525 Cd8a Related reagents 12526 Cd8b1 Related reagents
Synonyms	Cd8b1, Ly-3, Lyt2, Lyt-2, Lyt3, Lyt-3
RRID	AB_323752
Specificity	**Rat anti Mouse CD4:FITC/CD8:RPE dual colour reagent** was developed for the simultaneous recognition of mouse CD4 and CD8 cell surface antigens. Clone YTS191.1 recognises murine CD4, a T cell differentiation antigen expressed on thymocytes and helper/inducer T cells in the peripheral blood. Clone KT15 recognises a non-polymorphic epitope on the murine CD8 alpha chain.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).
References	1. Darby, C.R. *et al.* (1992) Evidence that long-term cardiac allograft survival induced by anti-CD4 monoclonal antibody does not require depletion of CD4+ T cells. Transplantation. 54 (3): 483-90. 2. Lis, M. *et al.* (2013) Modulatory effects of bestatin on T and B lymphocyte subsets and the concentration of cytokines released by Th1/Th2 lymphocytes in cyclophosphamide-treated mice Centr Eur J Immunol 38: 42-53 3. Ding, J. *et al.* (2012) Immune responses to a recombinant attenuated *Salmonella typhimurium* strain expressing a *Taenia solium* oncosphere antigen TSOL18. Comp Immunol Microbiol Infect Dis. 36 (1): 17-23. 4. Suszko, A. & Obmińska-Mrukowicz, B. (2013) Influence of polysaccharide fractions isolated from *Caltha palustris* L. on the cellular immune response in collagen-induced arthritis (CIA) in mice. A comparison with methotrexate. J Ethnopharmacol. 145 (1): 109-17. 5. Aravind, S. *et al.* (2015) Protective effects of recombinant glycoprotein D based prime boost approach against duck enteritis virus in mice model. Microb Pathog. 88: 78-86. 6. Zimecki, M. *et al.* (2015) Immune function in cyclophosphamide-treated mice is restored by the T-cell-tropic isoxazole derivative R-13. J Immunotoxicol. 12 (4): 322-9.

7. Szczypka, M. *et al.* (2020) Selegiline and clomipramine effects on lymphocyte subsets, regulatory T cells and sheep red blood cell (SRBC)-induced humoral immune response after in vivo administration in mice. Eur J Pharmacol. 887: 173560.
8. Piekarska, J. *et al.* (2020) Effect of aqueous extract from *Scutellaria baicalensis Georgi* roots on CD4+ and CD8+ T cell responses during experimental infection with *Trichinella spiralis* in mice. Pol J Vet Sci. 23 (4): 501-10.

Storage	Prior to reconstitution store at +4ºC. Following reconstitution store at +4ºC. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/DC034 20487
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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M375213:210104'

Printed on 12 Apr 2024