

Datasheet: MCA1413F

BATCH NUMBER 152415

Description:	HAMSTER ANTI MOUSE TCR ALPHA/BETA BETA CHAIN:FITC
Specificity:	TCR ALPHA/BETA BETA CHAIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	H57-597
Isotype:	IgG
Quantity:	0.1 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	▪			1/5 - 1/10

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 their own system using appropriate negative/positive controls.

Target Species	Mouse						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide						
Stabilisers	1% Bovine Serum Albumin						
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml						

Immunogen	Affinity purified murine T cell receptor.
RRID	AB_322434
Fusion Partners	Spleen cells from immunised Armenian hamsters were fused with cells of the mouse P3X63Ag.653 myeloma cell line.
Specificity	<p>Hamster anti mouse TCR α/β, clone H57-597, recognizes the β-chain of the murine α/β T cell receptor and does not show any reactivity to TCRγ/δ (Gascoigne 1990).</p> <p>Clone H57-597 has been reported to activate T-cells in immobilized form (Kubo <i>et al.</i> 1989) and has also been used for <i>in vivo</i> cell depletion (van der Heyde <i>et al.</i>, 1995 and Skeen & Ziegler 1993). Removal of sodium azide is recommended prior to using this clone in functional assays.</p>
Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.</p> <p>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).</p>
References	<ol style="list-style-type: none"> 1. Kubo, R.T. <i>et al.</i> (1989) Characterization of a monoclonal antibody which detects all murine alpha beta T cell receptors. J Immunol. 142 (8): 2736-42. 2. Goodman, T. & Lefrancois, L. (1989) Intraepithelial lymphocytes. Anatomical site, not T cell receptor form, dictates phenotype and function. J Exp Med. 170 (5): 1569-81. 3. Gascoigne, N.R. (1990) Transport and secretion of truncated T cell receptor beta-chain occurs in the absence of association with CD3. J Biol Chem. 265 (16): 9296-301. 4. van der Heyde, H.C. <i>et al.</i> (1995) Gamma delta T cells function in cell-mediated immunity to acute blood-stage Plasmodium chabaudi adami malaria. J Immunol. 154 (8): 3985-90. 5. Skeen, M.J. & Ziegler, H.K. (1993) Induction of murine peritoneal gamma/delta T cells and their role in resistance to bacterial infection. J Exp Med. 178 (3): 971-84. 6. Nilsson, I.A. <i>et al.</i> (2011) Evidence of hypothalamic degeneration in the anorectic anx/anx mouse. Glia. 59 (1): 45-57. 7. Lenzen, H. <i>et al.</i> (2012) Downregulation of the NHE3-binding PDZ-adaptor protein PDZK1 expression during cytokine-induced inflammation in interleukin-10-deficient mice. PLoS One. 7 (7): e40657.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA1413F>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[HAMSTER \(ARMENIAN\) IgG NEGATIVE CONTROL:FITC \(MCA2356F\)](#)

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