

## Datasheet: MCA1413FB

<b>Description:</b>	HAMSTER ANTI MOUSE TCR ALPHA/BETA BETA CHAIN:FITC
<b>Specificity:</b>	TCR ALPHA/BETA BETA CHAIN
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	H57-597
<b>Isotype:</b>	IgG
<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	▪			Neat
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
<b>Max Ex/Em</b>	<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					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative</b>	0.09% Sodium Azide						
<b>Stabilisers</b>	1% Bovine Serum Albumin						
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml						
<b>Immunogen</b>	Affinity purified murine T cell receptor.						
<b>Fusion Partners</b>	Spleen cells from immunised Armenian hamsters were fused with cells of the mouse P3X63Ag.653 myeloma cell line.						

<b>Specificity</b>	<p><b>Hamster anti mouse TCR <math>\alpha/\beta</math>, clone H57-597</b>, recognises the <math>\beta</math>-chain of the murine <math>\alpha/\beta</math> T cell receptor and does not show any reactivity to TCR<math>\gamma/\delta</math> (<a href="#">Gascoigne, N., 1990</a>).</p> <p>Clone H57-597 has been reported to activate T-cells in immobilised form (<a href="#">Kubo, R. et al., 1989</a>) and has also been used for <i>in vivo</i> cell depletion (<a href="#">van der Heyde, H. et al., 1995</a> and <a href="#">Skeen, M. &amp; Ziegler, H., 1993</a>). Removal of sodium azide is recommended prior to using this clone in functional assays. Bio-Rad recommend the <a href="#">Slide-A-Lyzer® Dialysis Cassette</a> for this purpose.</p>
<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> 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 (<a href="#">BUF041A/B</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Kubo, R.T. <i>et al.</i> (1989) Characterization of a monoclonal antibody which detects all murine alpha beta T cell receptors. <a href="#">J Immunol. 142 (8): 2736-42.</a></li> <li>2. Goodman, T. &amp; Lefrancois, L. (1989) Intraepithelial lymphocytes. Anatomical site, not T cell receptor form, dictates phenotype and function. <a href="#">J Exp Med. 170 (5): 1569-81.</a></li> <li>3. Gascoigne, N.R. (1990) Transport and secretion of truncated T cell receptor beta-chain occurs in the absence of association with CD3. <a href="#">J Biol Chem. 265 (16): 9296-301.</a></li> <li>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. <a href="#">J Immunol. 154 (8): 3985-90.</a></li> <li>5. Skeen, M.J. &amp; Ziegler, H.K. (1993) Induction of murine peritoneal gamma/delta T cells and their role in resistance to bacterial infection. <a href="#">J Exp Med. 178 (3): 971-84.</a></li> <li>6. Nilsson, I.A. <i>et al.</i> (2011) Evidence of hypothalamic degeneration in the anorectic anx/anx mouse. <a href="#">Glia. 59 (1): 45-57.</a></li> <li>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. <a href="#">PLoS One. 7 (7): e40657.</a></li> </ol>
<b>Storage</b>	<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>
<b>Shelf Life</b>	18 months from date of despatch.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Negative Controls

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

'M302129:170109'

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**America** Fax: +1 919 878 3751

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