

## Datasheet: MCA2183FB

<b>Description:</b>	RAT ANTI MOUSE CD13:FITC
<b>Specificity:</b>	CD13
<b>Other names:</b>	AMINOPEPTIDASE N
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	R3-63
<b>Isotype:</b>	IgG2a
<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	▪			1/5

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 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 from tissue culture supernatant						
<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>	Mouse intestinal APN
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P97449</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16790</a>    Anpep    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Lap1, Lap-1
<b>RRID</b>	AB_323560
<b>Fusion Partners</b>	Spleen cells from immunized mice were fused with cells of the IR983F rat myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD13 antibody, clone R3-63</b> recognizes mouse aminopeptidase N (APN), a cell surface protein homologous with human CD13. In the mouse, CD13 is a non-covalently linked homodimer of approximately 150 kDa subunits expressed by a variety of cells including monocytes, macrophages, dendritic cell and veiled cells.</p> <p>Rat anti Mouse CD13 antibody, clone R3-63 has been reported to block mouse APN enzyme activity (<a href="#">Hansen <i>et al.</i> 1993</a>).</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>Kamoun, W.S. <i>et al.</i> (2009) Edema control by cediranib, a vascular endothelial growth factor receptor-targeted kinase inhibitor, prolongs survival despite persistent brain tumor growth in mice. <a href="#">J Clin Oncol. 27: 2542-52.</a></li> <li>Hansen, A.S. <i>et al.</i> (1993) A mouse aminopeptidase N is a marker for antigen-presenting cells and appears to be co-expressed with major histocompatibility complex class II molecules. <a href="#">Eur J Immunol. 23 (9): 2358-64.</a></li> <li>Larsen, S.L. <i>et al.</i> (1996) T cell responses affected by aminopeptidase N (CD13)-mediated trimming of major histocompatibility complex class II-bound peptides. <a href="#">J Exp Med. 184 (1): 183-9.</a></li> <li>Rangel, R. <i>et al.</i> (2007) Impaired angiogenesis in aminopeptidase N-null mice. <a href="#">Proc Natl Acad Sci U S A. 104: 4588-93.</a></li> <li>Lahdenranta, J. <i>et al.</i> (2007) Treatment of hypoxia-induced retinopathy with targeted proapoptotic peptidomimetic in a mouse model of disease. <a href="#">FASEB J. 21: 3272-8.</a></li> <li>Li, P. <i>et al.</i> (2010) Use of adenoviral vectors to target chemotherapy to tumor vascular endothelial cells suppresses growth of breast cancer and melanoma. <a href="#">Mol Ther. 18: 921-8.</a></li> <li>van Deventer, H.W. <i>et al.</i> (2008) C-C chemokine receptor 5 on pulmonary fibrocytes facilitates migration and promotes metastasis via matrix metalloproteinase 9. <a href="#">Am J Pathol. 173: 253-64.</a></li> <li>Gabrilovac, J. <i>et al.</i> (2011) Expression, regulation and functional activities of</li> </ol>

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

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