

## Datasheet: MCA2183PET

<b>Description:</b>	RAT ANTI MOUSE CD13:RPE
<b>Specificity:</b>	CD13
<b>Other names:</b>	AMINOPEPTIDASE N
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	R3-63
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	25 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product 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 product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
<b>Reconstitution</b>	Reconstitute in 0.25 ml distilled water						
<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>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
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RPE 488nm laser	496	578					
<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 (NaN <sub>3</sub> )						
<b>Stabilisers</b>	1% bovine serum albumin 5% sucrose						

<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_1100680
<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>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR ( <a href="#">BUF041A/BUF041B</a> ).
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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>2. 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>3. 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>4. 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>5. 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>6. 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>7. 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>8. Gabrilovac, J. <i>et al.</i> (2011) Expression, regulation and functional activities of aminopeptidase N (EC 3.4.11.2; APN; CD13) on murine macrophage J774 cell line.</li> </ol>

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#### Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.  
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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2183PET>  
20487

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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