

## Datasheet: MCA1556PE

<b>Description:</b>	MOUSE ANTI HUMAN CD10:RPE
<b>Specificity:</b>	CD10
<b>Other names:</b>	CALLA
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	SN5c
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](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>	Human
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

**Reconstitution**  
 Reconstitute with 1.0 ml distilled water  
 Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
	RPE 561nm laser	546	578

**Preparation**  
 Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

**Buffer Solution**  
 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>	Partially purified cell membrane antigens from fresh leukemia cells
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08473</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4311</a>    MME    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	EPN
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse PS/NS1 /1-Ag4-1 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human CD10 antibody, clone SN5c</b> recognizes human neprilysin, also known as CD10, atriopetidase, enkephalinase, neutral endopeptidase 24.11, skin fibroblast elastase or common acute lymphocytic leukemia antigen (CALLA). CD10 is a 749 aminoacid, ~100 kDa single pass type II transmembrane glycoprotein expressed by acute lymphoblastic leukaemia cells and by peripheral blood granulocytes.</p> <p>Defects in the MME gene encoding CD10 can lead to the development of the peripheral nervous system disorder, Charcot-Marie-Tooth disease 2T (CMY2T), an axonal form of Marie-Charcot-Tooth disease characterized by either dominantly inherited primary peripheral demyelinating neuropathies, designated CMT1, or primary peripheral axonal neuropathies showing axonal degeneration in the absence of any obvious myelin alteration (CMT2).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>Biddle, W.C. <i>et al.</i> (1989) <i>In vitro</i> and <i>in vivo</i> cytotoxic activity of anti-human leukemia monoclonal antibodies SN5c and SN6 daunorubicin conjugates. <a href="#">Leuk Res. 13 (8): 699-707.</a></li> <li>Riemann, D. <i>et al.</i> (2001) Caveolae/lipid rafts in fibroblast-like synoviocytes: ectopeptidase-rich membrane microdomains. <a href="#">Biochem J. 354 (Pt 1): 47-55.</a></li> <li>Diaz-Romero, J. <i>et al.</i> (2008) Immunophenotypic changes of human articular chondrocytes during monolayer culture reflect <i>bona fide</i> dedifferentiation rather than amplification of progenitor cells. <a href="#">J Cell Physiol. 214: 75-83.</a></li> <li>Pilling, D. <i>et al.</i> (2009) Identification of markers that distinguish monocyte-derived fibrocytes from monocytes, macrophages, and fibroblasts. <a href="#">PLoS One. 4 (10): e7475.</a></li> <li>Manini, I. <i>et al.</i> (2020) Heterogeneity Matters: Different Regions of Glioblastoma Are Characterized by Distinctive Tumor-Supporting Pathways. <a href="#">Cancers (Basel). 12 (10)Oct 13 [Epub ahead of print].</a></li> <li>Glynn, E. &amp; Fromm, J.R. (2020) Immunophenotypic Characterization and Purification of Neoplastic Cells from Lymph Nodes Involved by T-Cell/Histiocyte-rich Large B-cell</li> </ol>

Lymphoma by Flow Cytometry and Flow Cytometric Cell Sorting. [Cytometry B Clin Cytom. 98 \(1\): 88-98.](#)

7. Caponnetto, F. *et al.* (2020) Human Adipose-Derived Stem Cells in Madelung's Disease: Morphological and Functional Characterization. [Cells. 10 \(1\): 44.](#)

8. Kirolos, S.A. and Gomer, R.H. (2022) The extracellular sialidase NEU3 induces neutrophil priming [bioRxiv. 24 Feb \[Epub ahead of print\].](#)

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**Storage** Prior to reconstitution store at +4°C.  
After reconstitution store at +4°C.  
DO NOT FREEZE.  
This product should be stored undiluted. 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 #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1556PE>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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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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