

## Datasheet: MCA2693

<b>Description:</b>	MOUSE ANTI HUMAN CD56
<b>Specificity:</b>	CD56
<b>Other names:</b>	N-CAM
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	123C3
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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	▪			1/25 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/100 - 1/200
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	

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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Membrane preparation of small lung carcinoma.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P13591</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4684</a>    NCAM1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	NCAM
<b>RRID</b>	AB_1102208
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the murine Sp2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD56 antibody, clone 123C3</b> recognizes human neural cell adhesion molecule (NCAM), otherwise known as CD56. The CD56 molecule is a cell surface glycoprotein which is expressed on neuroendocrine cells, natural killer cells and a subset of T cells in the peripheral blood. Three main isoforms of CD56 exist. Neurons express the largest 180 kDa form, while hemopoietic cells express the 140 kDa isoform. Mouse anti Human CD56 antibody, clone 123C3 recognizes both the 140 kDa and the 180 kDa isoform of the CD56 protein.</p> <p>In neuronal tissues, CD56 mediates homophilic and heterophilic adhesion and is implicated in neural development. Studies suggest that CD56 is also expressed on thyroid follicular epithelium and may play a role in autoimmune disease of the thyroid. CD56 is expressed in a range of tumours including tumours of the lung, neural derived malignancies and natural killer cell lymphomas.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Schol, D.J. <i>et al.</i> (1988) Monoclonal antibody 123C3, identifying small cell carcinoma phenotype in lung tumours, recognizes mainly, but not exclusively, endocrine and neuron-supporting normal tissues. <a href="#">Int J Cancer Suppl. 2: 34-40.</a></li> <li>Mooi, W.J. <i>et al.</i> (1988) Monoclonal antibody 123C3 in lung tumour classification. Immunohistology of 358 resected lung tumours. <a href="#">Mol Cell Probes. 2 (1): 31-7.</a></li> <li>Moolenaar, C.E. <i>et al.</i> (1990) Expression of neural cell adhesion molecule-related sialoglycoprotein in small cell lung cancer and neuroblastoma cell lines H69 and CHP-212. <a href="#">Cancer Res. 50 (4): 1102-6.</a></li> <li>Aloysius, M.M. <i>et al.</i> (2010) Mucins and CD56 as markers of tumour invasion and prognosis in periampullary cancer. <a href="#">Br J Surg. 97: 1269-78</a></li> <li>Wanka, G. <i>et al.</i> (2020) LDOC1 as Negative Prognostic Marker for Vulvar Cancer</li> </ol>

Patients. [Int J Mol Sci. 21 \(23\) Dec 05 \[Epub ahead of print\]](#).

6. Heylmann, D. *et al.* (2021) Comparison of DNA repair and radiosensitivity of different blood cell populations. [Sci Rep. 11 \(1\): 2478](#).

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**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),  
[DyLight®800](#), [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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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