

## Datasheet: MCA1429GA

<b>Description:</b>	MOUSE ANTI LAMIN A/C
<b>Specificity:</b>	LAMIN A/C
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	JOL2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			0.4 ug/ml
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			
Immunofluorescence	▪			

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) Mouse anti lamin A/C requires antigen retrieval using heat treatment prior to staining of paraffin sections. Citrate buffer pH 6.2 is recommended for this purpose.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Xenopus</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid

<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 Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant human lamin A
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P02545</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4000</a>    LMNA    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	LMN1
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2-0/Ag4 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human lamin A/C, clone JOL2</b> recognizes both recombinant and native forms of human lamin A and C, nuclear intermediate filament proteins encoded by the same LMNA gene via alternative splicing. In addition to providing structural support to the nuclear envelope, these proteins contribute to chromatin organization and the regulation of gene expression.</p> <p>Mutations in the LMNA gene are responsible for a broad spectrum of disorders, termed laminopathies, including Emery-Dreifuss muscular dystrophy and dilated cardiomyopathy.</p> <p>Mouse anti Human lamin A/C, clone JOL2 has been shown to bind to an epitope between amino acids 464-572.</p>
<b>Histology Positive Control Tissue</b>	Human colon
<b>References</b>	<ol style="list-style-type: none"> <li>1. Tilgner, K. <i>et al.</i> (2009) Dynamic complexes of A-type lamins and emerin influence adipogenic capacity of the cell via nucleocytoplasmic distribution of beta-catenin. <a href="#">J Cell Sci. 122: 401-13.</a></li> <li>2. Ivorra, C. <i>et al.</i> (2006) A mechanism of AP-1 suppression through interaction of c-Fos with lamin A/C. <a href="#">Genes Dev. 20: 307-20.</a></li> <li>3. Navarro, C.L. <i>et al.</i> (2004) Lamin A and ZMPSTE24 (FACE-1) defects cause nuclear disorganization and identify restrictive dermopathy as a lethal neonatal laminopathy. <a href="#">Hum Mol Genet. 13: 2493-503.</a></li> <li>4. Cummings, M. <i>et al.</i> (2006) XPA versus ERCC1 as chemosensitising agents to cisplatin</li> </ol>

- and mitomycin C in prostate cancer cells: role of ERCC1 in homologous recombination repair. [Biochem Pharmacol. 72: 166-75.](#)
5. Markiewicz, E. *et al.* (2006) The inner nuclear membrane protein emerin regulates beta-catenin activity by restricting its accumulation in the nucleus. [EMBO J. 25: 3275-85.](#)
6. Zhang, Q. *et al.* (2007) Nesprin-1 and -2 are involved in the pathogenesis of Emery Dreifuss muscular dystrophy and are critical for nuclear envelope integrity. [Hum Mol Genet. 16: 2816-33.](#)
7. Jean, D. *et al.* (2008) Cathepsin L expression is up-regulated by hypoxia in human melanoma cells: role of its 5'-untranslated region. [Biochem J. 413: 125-34.](#)
8. Ndong, Jde. L. *et al.* (2009) Down-regulation of the expression of RB18A/MED1, a cofactor of transcription, triggers strong tumorigenic phenotype of human melanoma cells. [Int J Cancer. 124: 2597-606.](#)

<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1429GA">https://www.bio-rad-antibodies.com/SDS/MCA1429GA</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

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

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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