## Datasheet: MCA1429GA BATCH NUMBER 161674

Description:	MOUSE ANTI LAMIN A/C
Specificity:	LAMIN A/C
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	JOL2
lsotype:	lgG1
Quantity:	0.1 mg

#### **Product Details**

Applications	This product has been re derived from testing with communications from the information. For general rad-antibodies.com/proto	eported to in our labo e originato protocol ro <u>ocols</u> .	work in t pratories rs. Pleas ecomme	he following application peer-reviewed publicat refer to references ind ndations, please visit <u>w</u>	s. This information is ions or personal dicated for further <u>ww.bio-</u>
		Yes	No	Not Determined	Suggested Dilution
	Flow Cytomotry	-			

	Flow Cytometry	•		
	Immunohistology - Frozen	•		
	Immunohistology - Paraffin (1)	■ 0.4 ug/ml		
	ELISA	•		
	Immunoprecipitation	•		
	Western Blotting			
	Immunofluorescence	•		
	Where this product has n	ot 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.			
Target Species	Human			
Species Cross	Reacts with: Xenopus			
Reactivity	N.B. Antibody reactivity a	and working conditions may vary between species. Cross		

**N.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.

Product Form	Purified IgG - liquid			
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant			
Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	<0.1% Sodium Azide (NaN <sub>3</sub> )			
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml			
Immunogen	Recombinant human lamin A			
External Database Links	UniProt: <u>P02545</u> <u>Related reagents</u> Entrez Gene: 4000 LMNA Related reagents			
Synonyms	LMN1			
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2-0/Ag4 myeloma cell line			
Specificity	<b>Mouse anti Human Iamin A/C, clone JOL2</b> recognizes both recombinant and native forms of human Iamin 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.			
	Mutations in the LMNA gene are responsible for a broad spectrum of disorders, termed laminopathies, including Emery-Dreifuss muscular dystrophy and dilated cardiomyopathy			
	Mouse anti Human lamin A/C, clone JOL2 has been shown to bind to an epitope betwee amino acids 464-572.			
Histology Positive Control Tissue	Human colon			
References	<ol> <li>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. <u>J Cell</u> <u>Sci. 122: 401-13.</u></li> <li>Ivorra, C. <i>et al.</i> (2006) A mechanism of AP-1 suppression through interaction of c-Fos with lamin A/C. <u>Genes Dev. 20: 307-20.</u></li> <li>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. <u>Hun</u></li> </ol>			

	Mol Genet. 13. 2493-303.				
	4. Cummings, M. et al. (2006) XPA versus ERCC1 as chemosensitising agents to cisplatin				
	and mitomycin C in prostate cancer cells: role of ERCC1 in homologous recombination				
	repair. <u>Biochem Pharmacol. 72: 166-75.</u>				
	5. Markiewicz, E. <i>et al.</i> (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. <u>Hum Mol</u>				
	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. <u>Biochem J. 413: 125-34.</u>				
	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.				
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 alignots at $-20^{\circ}$ C.				
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in				
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.				
Guarantaa	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.				
Guarantee	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.				
Guarantee Health And Safety	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.  12 months from date of despatch Material Safety Datasheet documentation #10040 available at:				
Guarantee Health And Safety Information	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.  12 months from date of despatch 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>				
Guarantee Health And Safety Information	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.  12 months from date of despatch 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				

## **Related Products**

# **Recommended Secondary Antibodies**

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

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & Sou	th Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21	
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50	То
Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.emu a		
hat	ch/lot specific datasheet	for this product	olease use our online sear	ch tool at: hio.	rad-antibodies com/datashee	te

batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M389297:210806'

#### Printed on 25 Mar 2023

© 2023 Bio-Rad Laboratories Inc | Legal | Imprint