Datasheet: MCA1429GA

BATCH NUMBER 280814

Description:	MOUSE ANTI LAMIN A/C
Specificity:	LAMIN A/C
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	JOL2
Isotype:	IgG1
Quantity:	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.

	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.

Target Species

Human

Species Cross Reactivity

Reacts with: Xenopus
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	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human lamin A
External Database Links	**UniProt:** P02545 Related reagents **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	**Mouse anti Human lamin A/C, clone JOL2** 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. 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 between amino acids 464-572.
Histology Positive Control Tissue	Human colon
References	1. Tilgner, K. *et al.* (2009) Dynamic complexes of A-type lamins and emerin influence adipogenic capacity of the cell via nucleocytoplasmic distribution of beta-catenin. J Cell Sci. 122: 401-13. 2. Ivorra, C. *et al.* (2006) A mechanism of AP-1 suppression through interaction of c-Fos with lamin A/C. Genes Dev. 20: 307-20. 3. Navarro, C.L. *et al.* (2004) Lamin A and ZMPSTE24 (FACE-1) defects cause nuclear disorganization and identify restrictive dermopathy as a lethal neonatal laminopathy. Hum

Mol Genet. 13: 2493-503.
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. 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.

Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1429GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
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...)	FITC

Recommended Negative Controls

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	**Worldwide**	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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

'M365304:200529'

Printed on 25 Mar 2023