Product Information Sheet

Polyclonal Anti-Lamin A/C

Catalogue No. PA1103

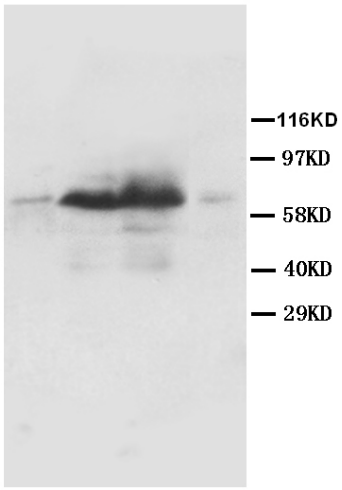
Lot No. 08F01

Ig type: rabbit IgG

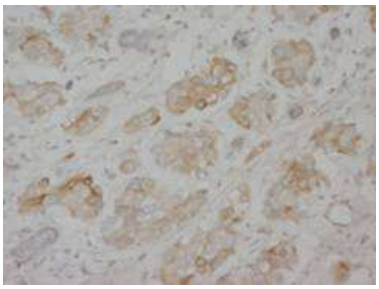
Size: 100µg/vial

Specificity
Human, mouse, rat.
No cross reactivity with other proteins.

Recommended application
Western blot
Immunohistochemistry(P)



Lane 1 : Rat spleen tissue Lysate
Lane 2 : HeLa Whole Cell Lysate
Lane 3 : SW620 Whole Cell Lysate
Lane 4 : smmc Whole Cell Lysate



Immunogen
A synthetic peptide corresponding to a sequence at the C-terminal of human Lamin A/C, identical to the related rat and mouse sequence.

Purity
Immunogen affinity purified.

Application
Western blot
At 2µg/ml with the appropriate system to detect Lamin A/C in cells and tissues.
Immunohistochemistry(P)
At 1-2µg/ml to detect Lamin A/C in formalin fixed and paraffin embedded tissues. Boiling the sections is required.
Other applications have not been tested.
Optimal dilutions should be determined by end user.

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

To reorder contact us at:
Antagene, Inc.
Toll Free: 1(866)964-2589
email: Info@antageneinc.com

Reconstitution	Storage
0.2ml of distilled water will yield a concentration of 500µg/ml.	At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

BACKGROUND

Lamins are structural protein components of the nuclear lamina, a protein network underlying the inner nuclear membrane that determines nuclear shape and size. There are three types of lamins, A,B and C. The lamin A/C (LMNA) gene contains 12 exons. Alternative splicing within exon 10 gives rise to two different mRNAs that code for pre-lamin A and lamin C. Lamin A/C mapped to 1q21.2-q21.3 and mutations in this gene cause a variety of human diseases including Emery-Dreifuss muscular dystrophy, dilated cardiomyopathy, and Hutchinson-Gilford progeria syndrome. Lamin A/C deficiency is thus associated with both defective nuclear mechanics and impaired mechanically activated gene transcription.

REFERENCE

1. Lin, F.; Worman, H. J. : Structural organization of the human gene encoding nuclear lamin A and nuclear lamin C. *J. Biol. Chem.* 268: 16321-16326, 1993.
2. Wydner, K. L.; McNeil, J. A.; Lin, F.; Worman, H. J.; Lawrence, J. B. : Chromosomal assignment of human nuclear envelope protein genes LMNA, LMNB1, and LBR by fluorescence in situ hybridization. *Genomics* 32: 474-478, 1996.
3. Lammerding, J.; Schulze, P. C.; Takahashi, T.; Kozlov, S.; Sullivan, T.; Kamm, R. D.; Stewart, C. L.; Lee, R. T. : Lamin A/C deficiency causes defective nuclear mechanics and mechanotransduction. *J. Clin. Invest.* 113: 370-378, 2004.