



Product Informatiion Sheet

Polyclonal Anti-Lamin A/C (Magnetic Bead Conjugate)

Catalogue No. PA1103-M Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human Lamin A/C,

Lot No. 08F01 identical to the related rat and mouse sequence.

Ig type: rabbit IgG1 Purification

Immunogen affinity purified

Size: 100µg/Vial

Contents

Specificity Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Human, mouse, rat.

No cross reactivity with other

proteins.

Storage

Store at 4°C for frequent use.

Recommended application Description:

Immunoprecipitation(IP) This Antagene antibody is immobilized by the covalent reaction of

hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic

beads. It is useful for immunoprecipitation

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.