diagenode
A Hologic Company

TECHNICAL DATASHEET

Lamin A/C antibody 3A6-4C11

Cat. No. C15200243

Type: Monoclonal
Isotype IgG2a kappa
Source: Mouse
Lot: 001
Size: 50 µg
Concentration: 1 µg/µl

Specificity: Human, mouse, rat, hamster, monkey
Purity: Protein G purified monoclonal antibody.
Storage: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Storage buffer: TBS containing 0.1 % Na-azide
Clone: 3A6-4C11

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Description: Monoclonal antibody raised in mouse against LMNA (Lamin A/C) using a recombinant protein.

Other names: LMNA, LMN1, CMT2B1, LGMD1B, CDCD1, FPLD2, Lamin, CMD1A, LMNL1, CDDC, EMD2,FPLD, HGPS, LDP1, LMNC, MADA, PRO1, FPL, IDC, LFP.

Applications

Applications	Suggested dilution	References
Western blotting	1:2,000 - 1:16,000	Fig 1, 2
Immunoprecipitation	5 µg/IP	Fig 3
Immunofluorescence	1:1,000	Fig 4

Target description

Lamin A/C (UniProt/Swiss-Prot entry P02545) are components of the nuclear lamina, a two-dimensional matrix of proteins located next to the inner nuclear membrane. The nuclear lamina is thought to provide a framework for the nuclear envelope and may also interact with chromatin. The nuclear lamina plays an important role in nuclear assembly, chromatin organization, nuclear membrane and telomere dynamics and lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. Lamins are therefore essential for normal development of peripheral nervous system and skeletal muscle and for muscle satellite cell proliferation. Lamin A and C, which result from differential splicing of the same gene are present in equal amounts in the lamina of mammals. Mutations in this gene lead to several diseases: Emery-Dreifuss muscular dystrophy, familial partial lipodystrophy, limb girdle muscular dystrophy, dilated cardiomyopathy, Charcot-Marie-Tooth disease, and Hutchinson-Gilford progeria syndrome.

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Results

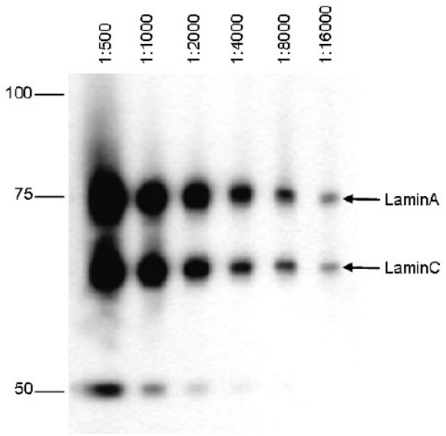

Figure 1. Western blot analysis using the Diagenode monoclonal antibody directed against Lamin A/C

Western blot was performed on protein extracts from NIH3T3 using the Diagenode antibody against Lamin A/C (Cat. No. C15200243). The antibody was used at different dilutions. The marker is shown on the left, the position of Lamin A and Lamin C is indicated on the right.

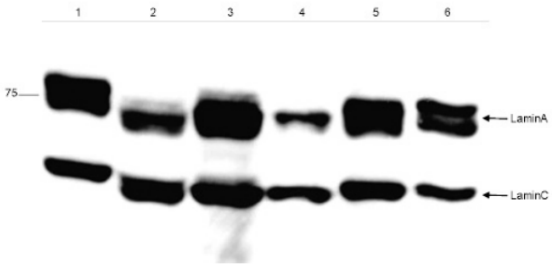

Figure 2. Western blot analysis using the Diagenode monoclonal antibody directed against Lamin A/C

Western blot was performed on protein extracts from HeLa, 293T, NIH-3T3, Rat1, BHK-21 and CV-1 cells (lanes 1-6, respectively) using the Diagenode antibody against Lamin A/C (Cat. No. C15200243). The marker is shown on the left, the position of Lamin A and Lamin C is indicated on the right.

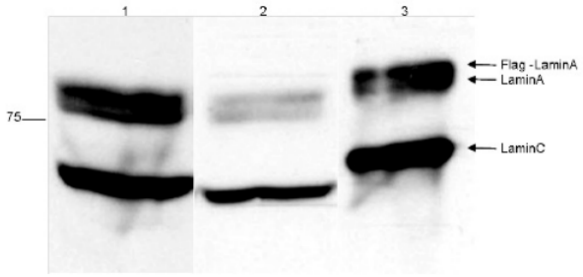

Figure 3. IP using the Diagenode monoclonal antibody directed against Lamin A/C

IP was performed on whole cell extracts (300 µg) from HeLa cells ectopically expressing Flag-tagged lamin A using 5 µg of the Diagenode antibody against Lamin A/C (Cat. No. C15200243). The immunoprecipitated proteins were subsequently analysed by Western blot with the Lamin A/C antibody as described above. Lane 3 shows the result of the IP, the input (15 µg) is shown in lane 1, lane 2 shows the cell lysate after the IP.

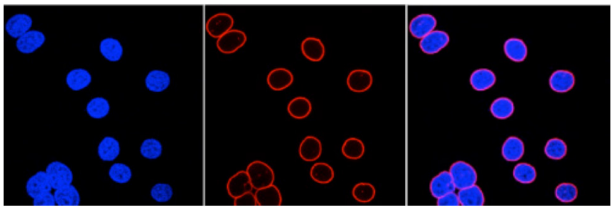

Figure 4. Immunofluorescence using the Diagenode monoclonal antibody directed against Lamin A/C

HeLa cells ectopically expressing Flag-tagged lamin A were fixed with 3.7% formaldehyde, permeabilized in 0,5% Triton X-100 and blocked in TBS containing 2% BSA. The cells were stained with the Lamin A/C antibody diluted 1:1,000 for 2 hours at RT, followed by incubation with an anti mouse secondary antibody coupled to AF596 for 1 h at RT (middle). Nuclei were counter-stained with Hoechst 33342 (left). A merge of the two stainings is shown on the right.