Lamin A/C antibody (mAb)

Catalog Nos: 39287, 39087, 39288

RRID: AB_2793218 Clone: 3A6-4C11 Isotype: IgG2a Application(s): ChIP, ICC, IF, IP, WB Reactivity: Hamster, Human, Monkey, Mouse, Rat

Background: Nuclear lamins are intermediate filament proteins that are the major structural component of the nuclear lamina on the inner surface of the nuclear envelope. Lamins A and Lamins C are splice variants of the Lamin A gene. Lamin A/C (CDCD1, LMN1, EMD2) expression is a hallmark of embryonic stem cell differentiation. In addition to adding structural integrity to the nucleus, lamins contribute to the makeup of the nuclear matrix. Lamins also help organize interphase chromatin through interactions with several chromatin proteins, including histones and Lap2, such that alteration in lamin organization results in disruption of DNA replication, transcription and RNA processing.

Immunogen: This Lamin A/C antibody was raised against a recombinant protein corresponding to amino acids 430-545 of human Lamin A.

Buffer: Cell culture supernatant containing mouse IgG, 30% glycerol, 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

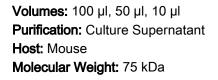
Applications Validated by Active Motif: WB: 1:500 - 1:4000 dilution ICC/IF: 1:500 - 1:2000 dilution

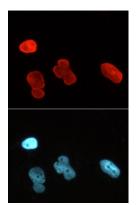
Both lamin A and lamin C are recognized by this sera, with lamin A (the slower migrating band on Western blot) sometimes appearing as a doublet. The addition of 0.05% Tween 20 in the blocking buffer and primary antibody incubation buffer is recommended to aid in detection by Western blot. Individual optimization may be required. For immunofluorescence experiments we recommend using paraformaldehyde (PFA) fixation.

This antibody is also available as an AbFlex[®] engineered recombinant antibody. For details on the corresponding AbFlex Recombinant Antibody, see Catalog No. 91189.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

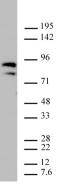
This product is for research use only and is not for use in diagnostic procedures.





Lamin A/C mAb (Clone 3A6-4C11) tested by immunofluorescence.

Staining of HeLa cells with Lamin A/C mAb (Clone 3A6-4C11). Cells were fixed with 3.7% PFA for 15 minutes at room temperature, permeabilized with PBS + 0.5% TritonTM X-100 and stained with Lamin A/C mAb (2 μ g/ml dilution) followed by 1:500 dilution ChromeoTM 546 Goat anti-mouse IgG (Cat No. 15033) (top panel) and DAPI (bottom panel).



Lamin A/C mAb (Clone 3A6-4C11) tested by Western blot.

Whole cell extract (20 µg) of HeLa cells stained with Lamin A/C mAb (Clone 3A6 -4C11) at a dilution of 1:2000.

panel) and DAFT (bottom panel).

Application Key: ChIP = Chromatin Immunoprecipitation; FACS = Flow Cytometry; IF = Immunofluorescence; IHC = Immunohistochemistry; IP = Immunoprecipitation; WB = Western Blot

