

## Lamin A/C Monoclonal Antibody

**catalog number: AN005340L**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

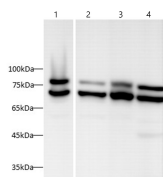
<b>Reactivity</b>	Human
<b>Immunogen</b>	Recombinant human Lamin A/C protein expressed by E.coli
<b>Host</b>	Mouse
<b>Isotype</b>	IgG1
<b>Clone</b>	4F1
<b>Purification</b>	Protein A/G Purification
<b>Buffer</b>	PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4

### Applications

### Recommended Dilution

<b>WB</b>	1:2000-1:4000
<b>IF</b>	1:500-1:1000

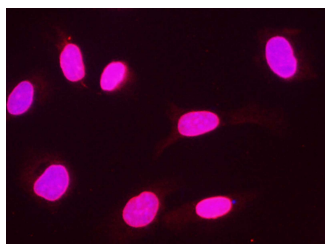
### Data



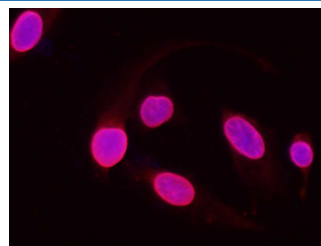
Western blot with Anti Lamin A/C Monoclonal Antibody at dilution of 1:3000. Lane 1: SH-SY5Y cell lysate, Lane 2: HL-60 cell lysate, Lane 3: U-87 MG cell lysate, Lane 4: Hep G2 cell lysate.

**Observed-MW:70,80 kDa**

**Calculated-MW:65 kDa**



Immunofluorescence analysis of U-2 OS cells using Lamin A/C Monoclonal Antibody at dilution of 1:500.



Immunofluorescence analysis of HeLa cells using Lamin A/C Monoclonal Antibody at dilution of 1:500.

### Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

### Background

### For Research Use Only

Lamin A/C is also named as LMNA, or LMN1. The lamin family of proteins make up the matrix and are highly conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. The lack of lamin A/C can be as a novel marker for undifferentiated embryonic stem cells and lamin A/C expression is as an early indicator of differentiation (PMID: 16179429). 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. This protein has 4 isoforms produced by alternative splicing with the molecular weight of 74 kDa, 65 kDa, 70 kDa and 64 kDa. This antibody can recognize 4 isoforms of Lamin A/C.