

## [KD Validated] Anti-LMNA Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

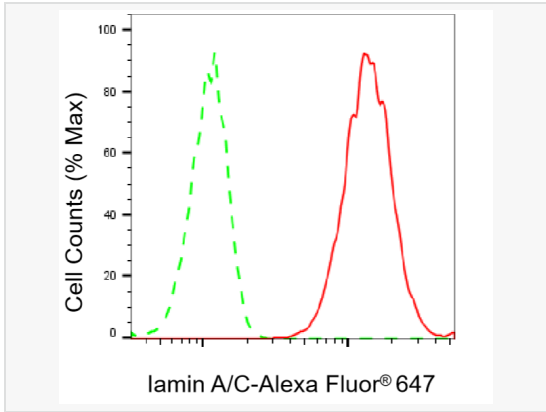
Catalog # R021422

### Product Information

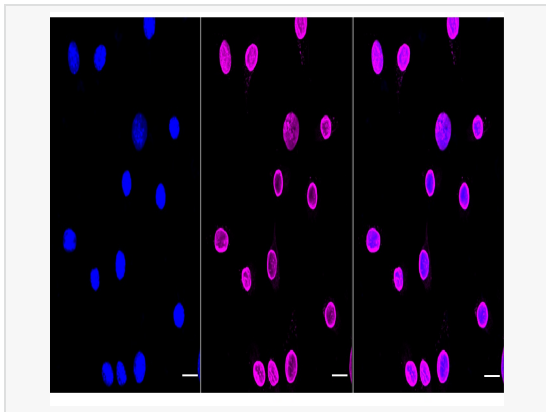
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	36F37G74
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Lamin A/C
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-LMNA Rabbit mAb [36F37G74] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

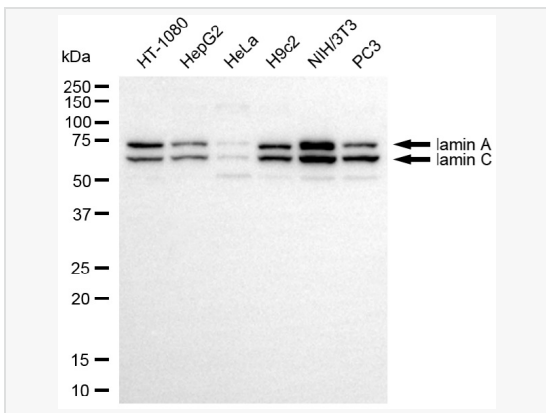
Synonyms	LMNA; Lamin A/C; HGPS; MADA; LMN1; Mandibuloacral Dysplasia Type A; Lamin A/C-Like 1; Prelamin-A/C; Progerin; LGMD1B; CMD1A; LMNL1; PRO1; Limb Girdle Muscular Dystrophy 1B (Autosomal Dominant); Cardiomyopathy, Dilated 1A (Autosomal Dominant); Epididymis Secretory Sperm Binding Protein; Progeria 1 (Hutchinson-Gilford Type); Renal Carcinoma Antigen NY-REN-32; 70 kDa Lamin; Lamin C; CMT2B1; CDCD1; FPLD2; Lamin; CDDC; EMD2; FPLD; LDP1; LMNC; FPL; IDC; LFP.
Calculated MW	Calculated MW: 74 kDa; Observed MW: 63,74 kDa
Uniprot ID	P02545
Gene ID	4000
Background	Lamins are components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane, which is thought to provide a framework for the nuclear envelope and may also interact with chromatin. Lamin A and C are present in equal amounts in the lamina of mammals. Play an important role in nuclear assembly, chromatin organization, nuclear membrane and telomere dynamics. Prelamin-A/C can accelerate smooth muscle cell senescence. It acts to disrupt mitosis and induce DNA damage in vascular smooth muscle cells (VSMCs), leading to mitotic failure, genomic instability, and premature senescence.



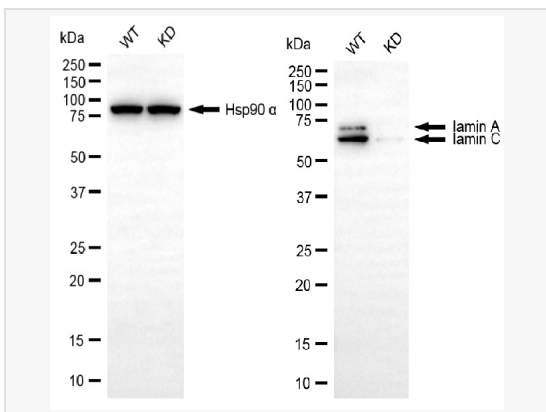
Flow cytometric analysis of Iamin A/C expression in C2C12 cells using Iamin A/C antibody (R021422, 1:2,000). Green, isotype control; red, Iamin A/C.



Immunocytochemical staining of C2C12 cells with Iamin A/C antibody (R021422, 1:1,000). Nuclei were stained blue with DAPI; Iamin A/C was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.



Western blotting analysis using Iamin A/C antibody (R021422). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Iamin A/C antibody (R021422, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Iamin A/C antibody (R021422). Lamin A/C expression in wild-type (WT) and Iamin A/C (LMNA) knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Iamin A/C antibody (R021422, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.