10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Lamin A/C Antibody
Mouse monoclonal antibody
Catalog # AN1244

Specification

Lamin A/C Antibody - Product Information

Application	**WB, IF**
Primary Accession	P02545
Reactivity	**Bovine, Human, Mouse, Rat**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG1**
Calculated MW	**64, 74 KDa**

Lamin A/C Antibody - Additional Information

Gene ID	**4000**
Gene Name	**LMNA**

Other Names
Prelamin-A/C, Lamin-A/C, 70 kDa lamin, Renal carcinoma antigen NY-REN-32, LMNA, LMN1

Target/Specificity
Recombinant full length human lamin C expressed in and purified from E. Coli.

Dilution
WB~~ 1:5000
IF~~ 1:1000

Format
Affinity purified from tissue culture supernatant.

Antibody Specificity
Specific for the ~64 and 74k lamin A and C proteins.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Lamin A/C Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

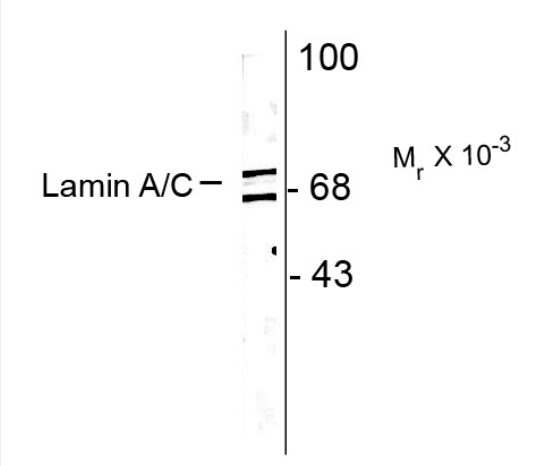
Lamin A/C Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

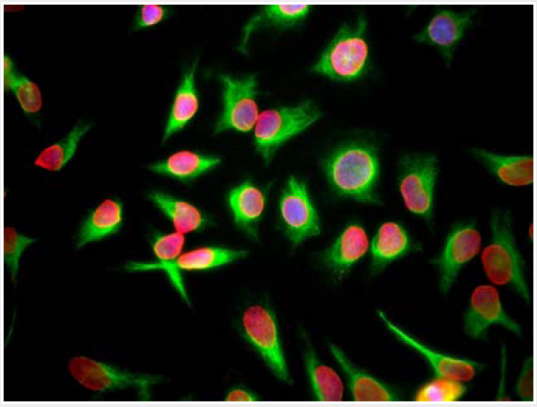
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Lamin A/C Antibody - Images



Western blot of HeLa lysate showing specific immunolabeling of the ~ 64k and 74k lamin A/C proteins.



Immunofluorescence of HeLa cells showing strong nuclear lamina staining of lamin A/C in red andvimentin in green.

Lamin A/C Antibody - Background

Lamins A and C are nuclear structural proteins that are part of the intermediate filament family and coded for by the same gene (LMNA). Lamins A and C are nearly identical except for their carboxy termini (McKeon et al., 1986). Mutations in the gene encoding lamins A/C have been shown to cause a variety of diseases including autosomal dominant Emery-Dreifuss muscular dystrophy (Bonne et al., 1995), autosomal dominant limb-girdle muscular dystrophy (Muchir et al., 2000) and Charcot-Marie-Tooth disorder type 2 (De Sandre-Giavonnoli et al., 2002).

Lamin A/C Antibody - References

Bonne G, Di Barletta MR, Varnous S, Bécane HM, Hammouda EH, Merlini L, Muntoni F, Greenberg CR, Gary F, Urtizberea JA, Duboc D, Fardeau M, Toniolo D, Schwartz K. (1999) Mutations in the gene encoding lamin A/C cause autosomal dominant Emery-Dreifuss muscular dystrophy. Nat Genet. 21(3):285-8

De Sandre-Giovannoli A, Chaouch M, Kozlov S, Vallat JM, Tazir M, Kassouri N, Szepetowski P, Hammadouche T, Vandenberghe A, Stewart CL, Grid D, Lévy N. (2002) Homozygous defects in LMNA, encoding lamin A/C nuclear-envelope proteins, cause autosomal recessive axonal neuropathy in human (Charcot-Marie-Tooth disorder type 2) and mouse. Am J Hum Genet. 70(3):726-36.

McKeon FD, Kirschner MW, Caput (1986) Homologies in both primary and secondary structure between nuclear envelope and intermediate filament proteins. Nature 319(6053):463-8.

Muchir A, Bonne G, van der Kooi AJ, van Meegen M, Baas F, Bolhuis PA, de Visser M, Schwartz K. (2000) Identification of mutations in the gene encoding lamins A/C in autosomal dominant limb girdle muscular dystrophy with atrioventricular conduction disturbances (LGMD1B). Hum Mol Genet. (9):1453-9.