

# Lamin A/C Antibody

100 µl  
 (10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IHC-P, F Endogenous	H, M, R, (B)	28 kDa, 70 kDa	Rabbit**

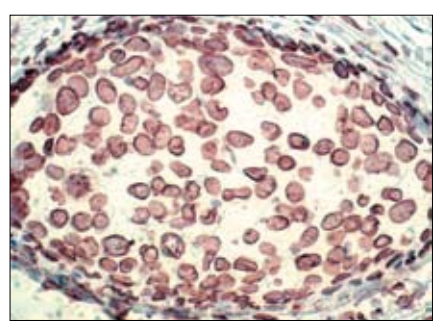
**Background:** Lamins are nuclear membrane structural components that are important in maintaining normal cell functions such as cell cycle control, DNA replication and chromatin organization (1-3). Lamin A/C is cleaved by caspase-6 and serves as a marker for caspase-6 activation. During apoptosis, Lamin A/C is specifically cleaved to a large (40-45 kDa) and a small (28 kDa) fragment (3,4). The cleavage of lamins results in nuclear disorganization and cell death (5,6).

**Specificity/Sensitivity:** Lamin A/C Antibody detects endogenous levels of total full length lamin A (and lamin C) (70 kDa), as well as the small fragment of lamin A (and lamin C) resulting from cleavage at aspartic acid 230 (28 kDa).

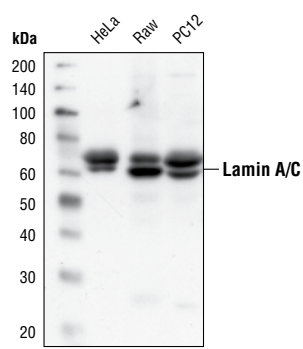
**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to residues surrounding Asp230 of human lamin A. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

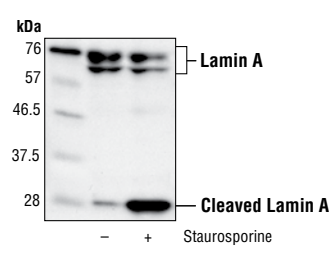
- Gruenbaum, Y. et al. (2000) *J. Struct. Biol.* 129, 313-323.
- Yabuki, M. et al. (1999) *Physiol. Chem. Phys. Med. NMR* 31, 77-84.
- Goldberg, M. et al. (1999) *Crit. Rev. Eukaryot. Gene Expr.* 9, 285-293.
- Orth, K. et al. (1996) *J. Biol. Chem.* 271, 16443-16446.
- Oberhammer, F.A. et al. (1994) *J. Cell Biol.* 126, 827-837.
- Rao, L. et al. (1996) *J. Cell Biol.* 135, 1441-1455.



Immunohistochemical staining of paraffin-embedded human breast tumor, showing staining of the nuclear envelope, using Lamin A/C Antibody.



Western blot analysis of extracts from HeLa, Raw 264.7 and PC12 cells, using Lamin A/C Antibody.



Western blot analysis of extracts from HeLa cells, untreated or staurosporine-treated (1 µM), using Lamin A/C Antibody.

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Entrez-Gene ID #** 4000  
**Swiss-Prot Acc. #** P02545

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**\*Species cross-reactivity is determined by western blot.**

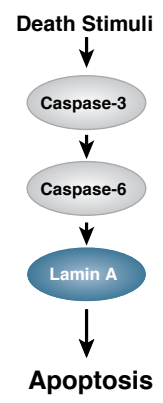
**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

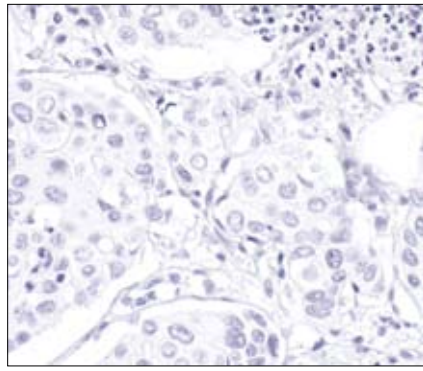
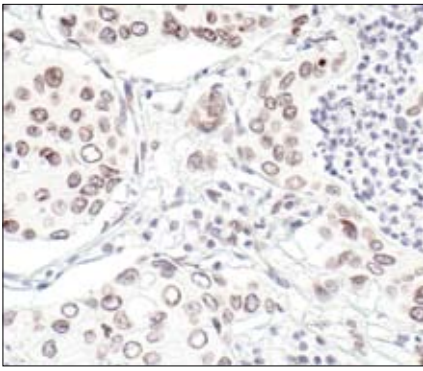
**Recommended Antibody Dilutions:**

Western blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:200
Unmasking buffer:	Citrate
Antibody diluent:	TBST-5%NGS
Flow Cytometry	1:50

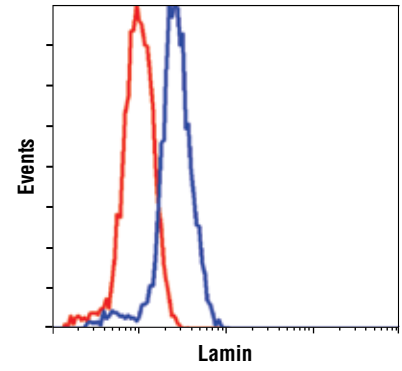
For application specific protocols please see the web page for this product at [www.cellsignaling.com](http://www.cellsignaling.com).

Please visit [www.cellsignaling.com](http://www.cellsignaling.com) for a complete listing of recommended companion products.





Immunohistochemical analysis of paraffin-embedded human lung carcinoma, using Lamin A/C Antibody in the presence of control peptide (left) or antigen-specific peptide (right).



Flow cytometric analysis of HeLa cells, using Lamin A/C Antibody (blue) compared to a nonspecific negative control antibody (red).