

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, IHC-P Endogenous	H, M, R, (B)	28 kDa, 70 kDa	Rabbit**

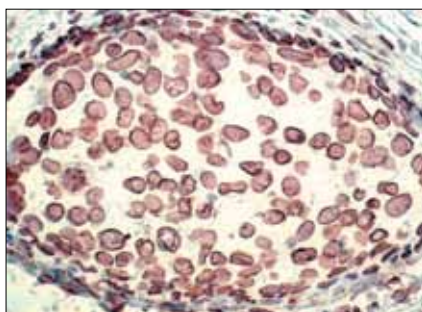
Background: Lamins are nuclear membrane structural components that are important in maintaining normal cell functions such as cell cycle control, DNA replication and chromatin organization (1-3). Lamin A/C is cleaved by caspase-6 and serves as a marker for caspase-6 activation. During apoptosis, Lamin 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).

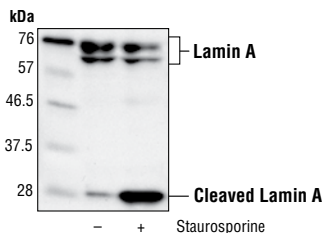
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp230 of human lamin A. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

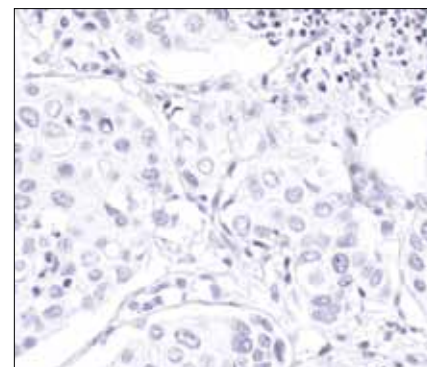
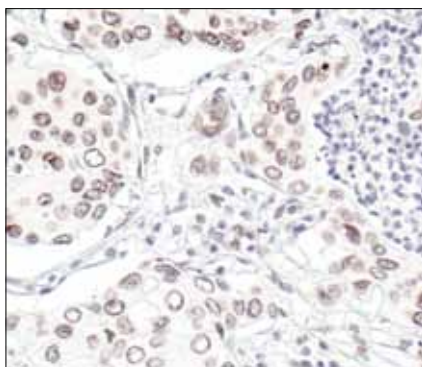
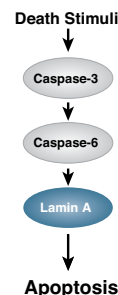
- (1) Gruenbaum, Y. et al. (2000) *J. Struct. Biol.* 129, 313-323.
- (2) Yabuki, M. et al. (1999) *Physiol. Chem. Phys. Med. NMR* 31, 77-84.
- (3) Goldberg, M. et al. (1999) *Crit. Rev. Eukaryot. Gene Expr.* 9, 285-293.
- (4) Orth, K. et al. (1996) *J. Biol. Chem.* 271, 16443-16446.
- (5) Oberhammer, F.A. et al. (1994) *J. Cell Biol.* 126, 827-837.
- (6) 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 cells, untreated or staurosporine-treated (1 µM), using Lamin A/C Antibody.



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).

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.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.