

Cleaved Lamin A (Small Subunit) (30H5) Mouse mAb

Orders ■ 877-616-CELL (2355)

orders@cellsignaling.com

Support ■ 877-678-TECH (8324)

info@cellsignaling.com

Web ■ www.cellsignaling.com

✓ 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.

Entrez-Gene ID # 4000

Swiss-Prot Acc. # P02545

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IF-IC Endogenous	H, M, R	28 kDa	Mouse IgG1**

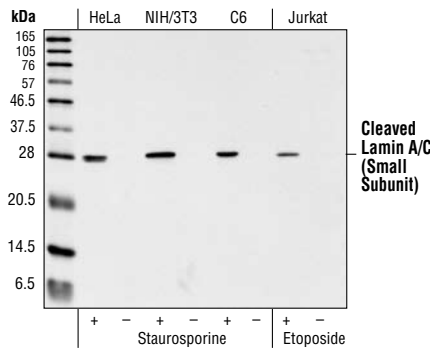
Background: Lamins are nuclear membrane structural components that are important in maintaining normal cell functions such as cell cycle control, DNA replication and chromatin organization (1–3). Lamin A/C is cleaved by caspase-6 and serves as a marker for caspase-6 activation. During apoptosis, Lamin 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: Cleaved Lamin A (Small Subunit) (30H5) Mouse mAb detects endogenous levels of the small fragment of lamin A (and lamin C) resulting from cleavage at aspartic acid 230. The antibody does not cross-react with full length lamin A or C.

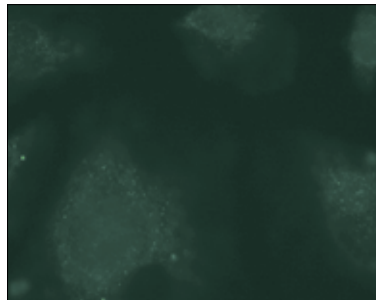
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to amino-terminal residues surrounding Asp230 of human lamin A.

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.



Western blot analysis of extracts from HeLa, NIH/3T3, and C6 cells, untreated or staurosporine-treated (1 µM), and Jurkat cells, untreated or etoposide-treated (25 µM), using Cleaved Lamin A (Small Subunit) (30H5) Mouse mAb.



Immunofluorescent analysis of HeLa cells, untreated (upper) or staurosporine-treated (lower), using Cleaved Lamin A (Small Subunit) (30H5) Mouse mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

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

Recommended Antibody Dilutions:

Western blotting 1:1000
Immunofluorescence (IF-IC) 1:100

For application specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended companion products.

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.