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Store at -20C  
#2035

## Cleaved Lamin A (Small Subunit) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

<b>Applications:</b> W, IHC-P, IF-IC	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 28	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P02545	<b>Entrez-Gene Id:</b> 4000
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### Product Usage Information

#### Application

Western Blotting  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:100  
1:200

### 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.

### Specificity/Sensitivity

Cleaved Lamin A (Small Subunit) Antibody detects the small fragment of lamin A (and lamin C) resulting from cleavage at aspartic acid 230 by caspase-6. The antibody does not cross-react with full length lamin A or lamin C.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino-terminal residues surrounding Asp230 in human lamin A. Antibodies are purified by protein A and peptide affinity chromatography.

### 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 into a large (41-50 kDa) and a small (28 kDa) fragment (3,4). The cleavage of lamins results in nuclear dysregulation and cell death (5,6).

### Background References

- Gruenbaum, Y. et al. (2000) *J Struct Biol* 129, 313-23.
- Yabuki, M. et al. (1999) *Physiol Chem Phys Med NMR* 31, 77-84.
- Goldberg, M. et al. (1999) *Crit Rev Eukaryot Gene Expr* 9, 285-93.
- Orth, K. et al. (1996) *J Biol Chem* 271, 16443-6.
- Oberhammer, F.A. et al. (1994) *J Cell Biol* 126, 827-37.
- Rao, L. et al. (1996) *J Cell Biol* 135, 1441-55.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

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

### Applications Key

**W:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat

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