BACKGROUND
A unique family of cysteine proteases has been described that differs in sequence, structure and substrate specificity from any previously described protease family. This family, termed Ced-3/ICE, is comprised of ICE, CPP32, ICH-1/Nedd-2, Tx, Mch2, Mch3 (ICE-LAP3 or CMH-1), Mch4 and ICE-LAP6. Ced-3/ICE family members function as key components of the apoptotic machinery and act to destroy specific target proteins which are critical to cellular longevity. Nuclear lamins are critical to maintaining the integrity of the nuclear envelope and cellular morphology. The nuclear Lamin A is cleaved by Mch2, but not CPP32. Nuclear Lamin B is fragmented as a consequence of apoptosis by an unidentified member of the ICE family. Lamin C is a splice variant of Lamin A, differing only at the carboxy-terminus. Lamins A and C are identical for the first 566 amino acids, with Lamin C differing only in 6 unique carboxy-terminal amino acids.

CHROMOSOMAL LOCATION
Genetic locus: LMNA (human) mapping to 1q22; Lmna (mouse) mapping to 3 F1.

SOURCE
Lamin A/C (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Lamin A/C of human origin.

PRODUCT
Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-6215 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
Lamin A/C (N-18) is recommended for detection of Lamin A and Lamin C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100 to 1:1,000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50 to 1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30 to 1:3,000).

Lamin A/C (N-18) is also recommended for detection of Lamin A and Lamin C in additional species, including equine, canine, bovine and porcine.


Molecular Weight of Lamin A/C: 69/62 kDa.

STORAGE
Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

DATA
Lamin A/C (N-18): sc-6215. Western blot analysis of Lamin A expression in non-transfected 293T: sc-117752 (A), human Lamin A transfected 293T: sc-177452 (B) and Hs 68 (C) whole cell lysates.

SELECT PRODUCT CITATIONS