**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 six unique carboxy-terminal amino acids.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

Lamin A/C (638) is a mouse monoclonal antibody raised against Lamin preparation of porcine origin.

**PRODUCT**

Each vial contains 200 µg IgG2b, kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for ChIP application, sc-7292 X, 200 µg/0.1 ml.

Lamin A/C (638) is available conjugated to agarose (sc-7292 AC), 500 µg/0.25 ml agarose in 1 ml for IP; to either phycoerythrin (sc-7292 PE), Alexa Fluor® 546 (sc-7292 AF546) or Alexa Fluor® 594 (sc-7292 AF594), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7292 AF680) or Alexa Fluor® 790 (sc-7292 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Lamin A/C (638) 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 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).


Lamin A/C (638) X TransCruz antibody is recommended for ChIP assays. Molecular Weight of Lamin A/C: 69/62 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

**STORAGE**

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

**DATA**

![Image](image1)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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