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, 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 as components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane which is thought to provide a framework for the nuclear envelope and may also interact with chromatin. B-type Lamins, such as Lamin B1, undergo a series of modifications, such as farnesylation and phosphorylation. Lamin B1 is a 586 amino acid protein that is encoded by a gene which, when mutated, is involved in the pathogenesis of autosomal dominant adult-onset leukodystrophy (ADLD), a disease characterized by cerebellar dysfunction and symmetric demyelination of the central nervous system.

CHROMOSOMAL LOCATION

Genetic locus: LMNB1 (human) mapping to 5q23.2; Lmnb1 (mouse) mapping to 18 D3.

SOURCE

Lamin B1 (119D5-F1) is a mouse monoclonal antibody raised against lamins purified from liver of rat origin.

PRODUCT

Each vial contains 50 µg IgG1 in 500 µl PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

Lamin B1 (119D5-F1) is recommended for detection of Lamin B1 of mouse, rat, human, bovine and canine 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Lamin B1: 67 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Y79 cells lysate: sc-2240 or F9 cell lysate: sc-2245.

STORAGE

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

DATA

See Lamin B1 (A-11): sc-37700 for Lamin B1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.

SELECT PRODUCT CITATIONS


