

**Mouse Anti-Lamin B1 [A11]: MC0432, MC0432RTU7**

**Intended Use:** For Research Use Only

**Description:** 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.

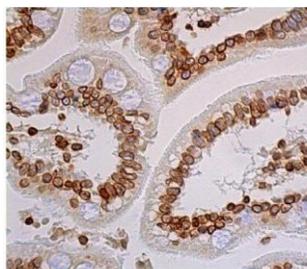
**Specifications**

Clone: A11  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human, mouse, rat  
 Immunogen: C-terminus of human Lamin B1 aa 401-490  
 Localization: Nucleus inner membrane  
 Formulation: Protein A purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, ICC/IF, IP, WB  
 Package:

Description	Catalog No.	Size
Lamin B1 Concentrated	MC0432	1 ml
Lamin B1 Prediluted	MC0432RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Colon, liver and transitional cell carcinoma of the bladder tissues, Ramos cells  
 Concentrated Dilution: 25-100  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: Overnight @ 4°C  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human small intestine tissue stained with anti-Lamin B1 using DAB showing nuclear envelope staining of glandular cells

**References:**

1. Rate of Progression through a Continuum of Transit-Amplifying Progenitor Cell States Regulates Blood Cell Production. Hojun Li, et al. Dev Cell. Apr 8;49(1):118-129, 2019.
2. Indoleamine 2,3-dioxygenase 1 in coronary atherosclerotic plaque enhances tissue factor expression in activated macrophages. Yuki Watanabe, et al. Res Pract Thromb Haemost. Jul 13;2(4):726-735, 2018.

Doc. 100-MC0432  
Rev. A