

Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker ab8982



★★★★☆ **6 Abreviews** **40 References** **7 图像**

概述

| | |
|-------|---|
| 产品名称 | Anti-Lamin B1抗体[119D5-F1] -核Envelope Marker |
| 描述 | 小鼠单克隆抗体[119D5-F1] to Lamin B1 -核Envelope Marker |
| 宿主 | Mouse |
| 特异性 | Reacts with an epitope located C-terminal of residue 231 in lamin B1. Reacts against lamin B1, does not cross react with lamin B2. Lamins do not appear to be universally distributed among different cell and tissue types. ab8982 has been shown to react with HeLa and 3T3 cells in immunocytochemistry. Other cell/tissue types have not been tested. |
| 经测试应用 | 适用于: Flow Cyt, ICC/IF, IHC-Fr |
| 种属反应性 | 与反应: Mouse, Human, Pig |
| 免疫原 | Full length native protein (purified) corresponding to Rat Lamin B1 (C terminal). Immunogen is purified rat liver lamins. Database link: <u>P20700</u> |
| 表位 | C-terminal to residue 231. |
| 阳性对照 | ICC/IF: HAP1, HeLa and 3T3 cells. WB: Human mammary cell lysate. IHC-Fr: Human kidney and colon tissue; MCF7 cell culture; Swine liver tissue. Flow Cyt: HeLa cells |
| 常规说明 | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p> |

性能

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|------|---|
| 形式 | Liquid |
| 存放说明 | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |

| | |
|------|--|
| 存储溶液 | Preservative: 0.09% Sodium azide Constituent: 99% PBS |
| 纯度 | Protein G purified |
| 克隆 | 单克隆 |
| 克隆编号 | 119D5-F1 |
| 骨髓瘤 | P3x63-Ag8.653 |
| 同种型 | IgG1 |
| 轻链类型 | kappa |

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab8982于以下的经测试应用

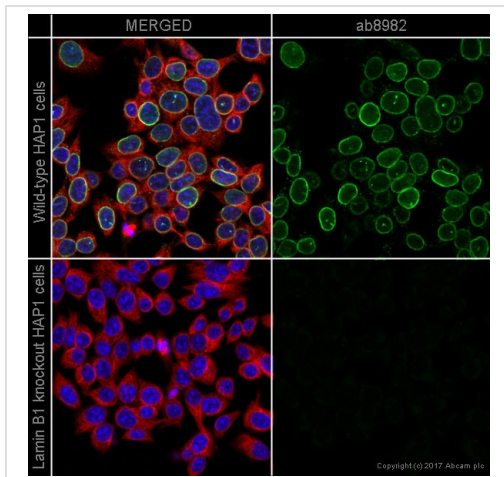
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|----------|------|--|
| Flow Cyt | | 1/100 - 1/200. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |
| ICC/IF | | Use a concentration of 0.5 µg/ml. |
| IHC-Fr | | Use at an assay dependent concentration. |

靶标

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| 功能 | Lamins are 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. |
| 疾病相关 | Defects in LMNB1 are the cause of leukodystrophy demyelinating autosomal dominant adult-onset (ADLD) [MIM:169500]. ADLD is a slowly progressive and fatal demyelinating leukodystrophy, presenting in the fourth or fifth decade of life. Clinically characterized by early autonomic abnormalities, pyramidal and cerebellar dysfunction, and symmetric demyelination of the CNS. It differs from multiple sclerosis and other demyelinating disorders in that neuropathology shows preservation of oligodendroglia in the presence of subtotal demyelination and lack of astrogliosis. |
| 序列相似性 | Belongs to the intermediate filament family. |
| 翻译后修饰 | B-type lamins undergo a series of modifications, such as farnesylation and phosphorylation. Increased phosphorylation of the lamins occurs before envelope disintegration and probably plays a role in regulating lamin associations. |
| 细胞定位 | Nucleus inner membrane. |

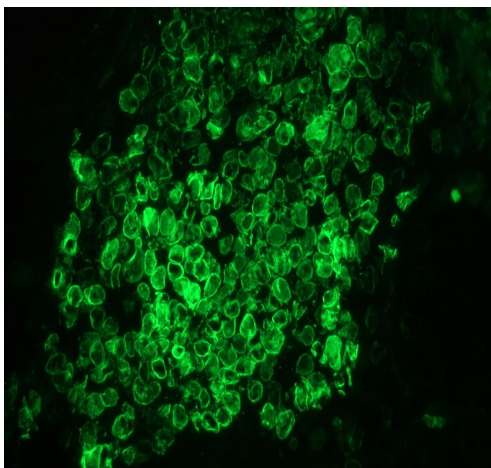
图片



Immunocytochemistry/ Immunofluorescence - Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker (ab8982)

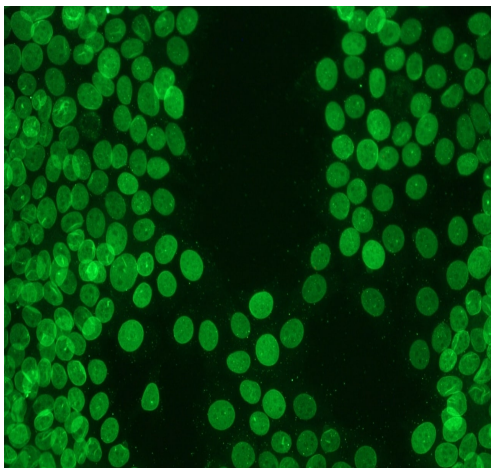
ab8982 staining Lamin B1 in wild-type HAP1 cells (top panel) and LMNB1 knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab8982 at 0.5µg/ml and **ab202272** at 1/250 dilution (shown in pseudocolour red) overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Mouse IgG (Alexa Fluor® 488) (**ab150117**) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



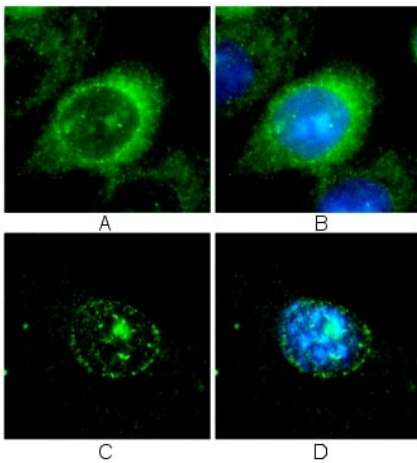
Immunohistochemistry (Frozen sections) - Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker (ab8982)

Immunohistochemistry on frozen sections of human kidney showing nuclear lamina staining in epithelial and connective tissue cells.



Immunohistochemistry (Frozen sections) - Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker (ab8982)

Immunohistochemistry of MCF-7 cell culture showing nuclear lamina staining.



Immunocytochemistry/ Immunofluorescence - Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker (ab8982)

This image is courtesy of Marilena Ciciarello & Patrizia Lavia, University La Sapienza

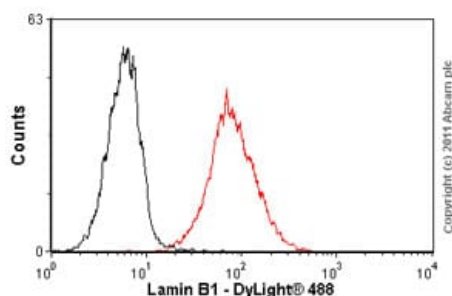
Methanol fixed HeLa and 3T3 cells ([ab7179](#)) were stained with ab8982 (1/50 and 1/20 respectively). The cells were fixed in 100% methanol for 6 minutes at -20°C. ab8982 clearly stains the nuclear envelope with very little background staining.

A: HeLa cells + ab8982 (1/50) (green)

B: HeLa cells counterstained with DAPI (blue)

C: 3T3 cells + ab8982 (1/20) (green)

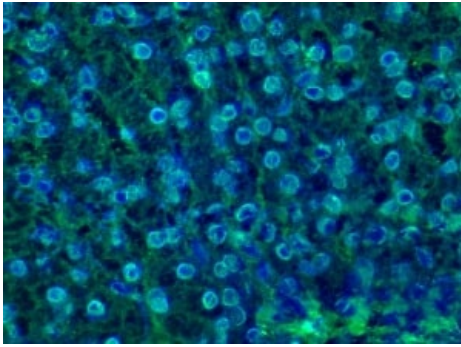
D: 3T3 cells counterstained with DAPI (blue)



Flow Cytometry - Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker (ab8982)

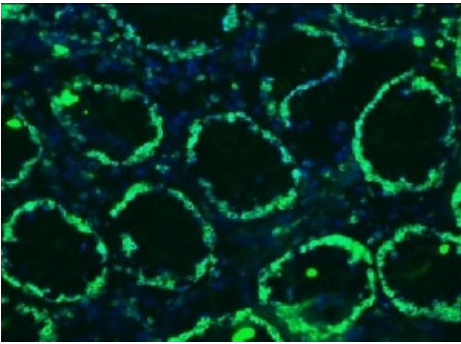
Overlay histogram showing HeLa cells stained with ab8982 (red line). The cells were fixed with 100% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum ([ab7481](#)) / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab8982, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was Mouse IgG1 [ICIGG1] ([ab91353](#), 2µg/1x10⁶ cells) used under the same conditions.

Acquisition of >5,000 events was performed.



Immunohistochemistry on frozen sections of swine liver showing nuclear lamina staining in hepatocytes.

Immunohistochemistry (Frozen sections) - Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker (ab8982)



Immunohistochemistry on frozen sections of human colon showing nuclear lamina staining in epithelial and connective tissue cells.

Immunohistochemistry (Frozen sections) - Anti-Lamin B1 antibody [119D5-F1] - Nuclear Envelope Marker (ab8982)

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