# abcam

## Product datasheet

## HRP Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Loading Control ab194109



יובעבדיו RabMAb

16 References 画像数 4

#### 製品の概要

製品名 HRP Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Loading Control

製品の詳細 HRP Rabbit monoclonal [EPR8985(B)] to Lamin B1 - Nuclear Loading Control

由来種 Rabbit 標識 HRP

アプリケーション 適用あり: WB. IHC-P

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. 免疫原

ポジティブ・コントロール WB: Jurkat, MOLT4, Y79, CaCo 2 whole cell lysates. IHC: Normal human colon tissue.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

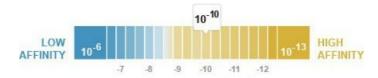
#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

 $K_D = 1.95 \times 10^{-10} M$ 解離定数(K<sub>D</sub>値)



#### Learn more about K<sub>D</sub>

**バッファー** pH: 7.40

Preservative: 0.1% Proclin 300 Solution

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

精製度 Protein A purified

**ポリ/モノ** モノクローナル **ウローン名** EPR8985(B)

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab194109の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/5000. Detects a band of approximately 70 kDa (predicted molecular weight: 66 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.  ab199507 - Rabbit monoclonal IgG (HRP), is suitable for use an as isotype control with this antibody.

#### ターゲット情報

機能 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.

関連疾患 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.

**配列類似性** Belongs to the intermediate filament family.

翻訳後修飾 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.

細胞内局在 Nucleus inner membrane.

### 画像



Western blot - HRP Anti-Lamin B1 antibody
[EPR8985(B)] - Nuclear Loading Control (ab194109)

**All lanes :** HRP Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Loading Control (ab194109) at 1/5000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: LMNB1 (Lamin B1) knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 66 kDa **Observed band size:** 70 kDa

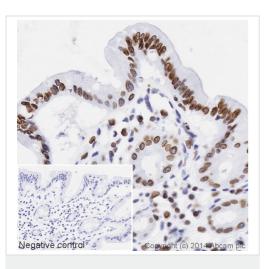
Exposure time: 3 minutes

ab194109 was shown to specifically react with Lamin B1 in wild-type HAP1 cells as signal was lost in LMNB1 (Lamin B1) knockout cells. Wild-type and LMNB1 (Lamin B1) knockout samples were subjected to SDS-PAGE. Ab194109 and ab184095 (Mouse monoclonal [mAbcam 9484] to GAPDH - Loading Control (Alexa Fluor<sup>®</sup> 680) loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. The loading control was imaged using the Licor Odyssey CLx prior to blots being developed with ECL technique.

IHC image of Lamin B1 staining in a section of formalin-fixed paraffin-embedded normal human colon tissue\*, performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab194109 at 1/500 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - HRP Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Loading Control (ab194109)



Western blot - HRP Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Loading Control (ab194109)

**All lanes :** HRP Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Loading Control (ab194109) at 1/5000 dilution

Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 2 :** MOLT4 (Human acute lymphoblastic leukemia cell line) Whole Cell Lysate

Lane 3 : Y79 (Human retinoblastoma cell line) Whole Cell Lysate
Lane 4 : Caco 2 (Human colonic carcinoma cell line) Whole Cell
Lysate

Lysates/proteins at 10 µg per lane.

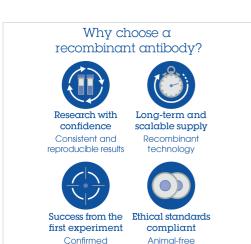
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 66 kDa **Observed band size:** 70 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab194109 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



HRP Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Loading Control (ab194109)

production

specificity

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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