# abcam

### **Product datasheet**

## Alexa Fluor® 647 Anti-Lamin B1 antibody [EPR8985(B)] -Nuclear Envelope Marker ab194108

КО 評価済 มาวชาวง RabMAb

<u>1 References</u> 画像数 3

製品の概要		
製品名	Alexa Fluor® 647 Anti-Lamin B1 antibody [EPR8985(B)] - Nuclear Envelope Marker	
製品の詳細	Alexa Fluor® 647 Rabbit monoclonal [EPR8985(B)] to Lamin B1 - Nuclear Envelope Marker	
由来種	Rabbit	
標識	Alexa Fluor® 647. Ex: 652nm, Em: 668nm	
アプリケーション	適用あり: ICC/IF	
種交差性	交差種: Human	
	交差が予測される動物種: Mouse, Rat	
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
ポジティブ・コントロール	ICC/IF: HeLa cells, HAP1-LMNB1 cells.	
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 <u>see here</u> .	
	Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit	
	monoclonal antibodies. For details on our patents, please refer to <b>RabMAb<sup>®</sup> patents</b> .	
	Alexa Fluor $^{ extsf{@}}$ is a registered trademark of Molecular Probes, lnc, a Thermo Fisher Scientific	
	Company. The Alexa Fluor $^{ m I\!R}$ dye included in this product is provided under an intellectual property	
	license from Life Technologies Corporation. As this product contains the Alexa Fluor $^{ m  extsf{B}}$ dye, the	
	purchase of this product conveys to the buyer the non-transferable right to use the purchased	
	product and components of the product only in research conducted by the buyer (whether the	
	buyer is an academic or for-profit entity). As this product contains the Alexa Fluor $^{ m  extsf{B}}$ dye the sale of	
	this product is expressly conditioned on the buyer not using the product or its components, or any	
	materials made using the product or its components, in any activity to generate revenue, which	
	may include, but is not limited to use of the product or its components: in manufacturing; (ii) to	
	provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or	
	prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research.	
	For information on purchasing a license to this product for purposes other than research, contact	
	Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or	

#### outlicensing@thermofisher.com.

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.
解離定数(K <sub>D</sub> 値)	$K_{D} = 1.95 \times 10^{-10} M$
16	LOW 10 <sup>-6</sup> -7 -8 -9 -10 -11 -12 Learn more about K <sub>D</sub>
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR8985(B)
アイソタイプ	lgG

アプリケーション

The Abpromise guaranteeAbpromise保証は、次のテスト済みアプリケーションにおけるab194108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
ICC/IF		1/100.

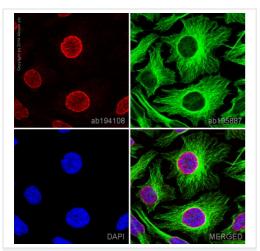
ターゲット情報	
機能	Lamins are components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane, which is thought to provide a framework for the nuclear envelope and may also interact with chromatin.
関連疾患	Defects in LMNB1 are the cause of leukodystrophy demyelinating 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.

Nucleus inner membrane.

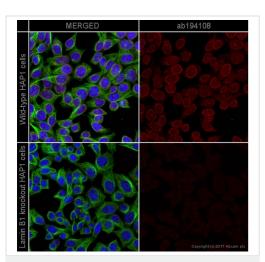
#### 細胞内局在

#### 画像



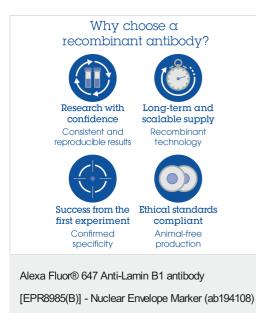
Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Lamin B1 antibody [EPR8985(B)] -Nuclear Envelope Marker (ab194108) ab194108 staining Lamin B1 in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab194108 at a 1/100 dilution (shown in red) and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

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



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Lamin B1 antibody [EPR8985(B)] -Nuclear Envelope Marker (ab194108) ab194108 staining Lamin B1 in wild-type HAP1 cells (top panel) and Lamin B1 knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Tween20 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 overnight at +4°C with ab194108 at a 1/100 dilution (shown in red) and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

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



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