# abcam

# Product datasheet

# Alexa Fluor® 488 Anti-BRG1 antibody [EPNCIR111A] ab196314



ועלטעבעו RabMAb

## 画像数3

### 製品の概要

特記事項

製品名 Alexa Fluor® 488 Anti-BRG1 antibody [EPNCIR111A]

製品の詳細 Alexa Fluor® 488 Rabbit monoclonal [EPNCIR111A] to BRG1

由来種 Rabbit

Alexa Fluor® 488. Ex: 495nm, Em: 519nm 標識

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: SW480 cells. HAP1-SMARCA4 cells

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

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outlicensing@thermofisher.com.

### 製品の特性

製品の状態

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.

**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** EPNCIR111A

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ab196314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		1/500 - 1/1000. This product gave a positive signal in SW480 cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).

### ターゲット情報

### 機能

Transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. Component of the CREST-BRG1 complex, a multiprotein complex that regulates promoter activation by orchestrating a calcium-dependent release of a repressor complex and a recruitment of an activator complex. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex. At the same time, there is increased recruitment of CREBBP to the promoter by a CREST-dependent mechanism, which leads to transcriptional activation. The CREST-BRG1 complex also binds to the NR2B promoter, and activity-dependent induction of NR2B expression involves a release of HDAC1 and recruitment of CREBBP. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuronspecific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the selfrenewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth. SMARCA4/BAF190A may promote neural stem cell self-renewal/proliferation by enhancing Notch-dependent proliferative signals, while concurrently making the neural stem cell insensitive to SHH-dependent differentiating cues (By similarity). Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-

mediated transrepression of the CYP27B1 gene. Acts as a corepressor of ZEB1 to regulate E-cadherin transcription and is required for induction of epithelial-mesenchymal transition (EMT) by ZEB1.

組織特異性 Colocalizes with ZEB1 in E-cadherin-negative cells from established lines, and stroma of normal

colon as well as in de-differentiated epithelial cells at the invasion front of colorectal carcinomas

(at protein level).

関連疾患 Defects in SMARCA4 are the cause of rhabdoid tumor predisposition syndrome type 2 (RTPS2)

[MIM:613325]. RTPS2 is a familial cancer syndrome predisposing to renal or extrarenal malignant rhabdoid tumors and to a variety of tumors of the central nervous system, including choroid plexus carcinoma, medulloblastoma, and central primitive neuroectodermal tumors. Rhabdoid tumors

are the most aggressive and lethal malignancies occurring in early childhood.

**配列類似性** Belongs to the SNF2/RAD54 helicase family.

Contains 1 bromo domain.

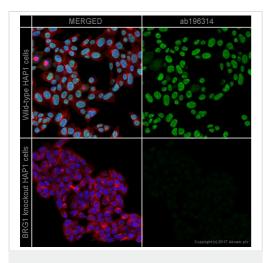
Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.

Contains 1 HSA domain.

翻訳後修飾 Phosphorylated upon DNA damage, probably by ATM or ATR.

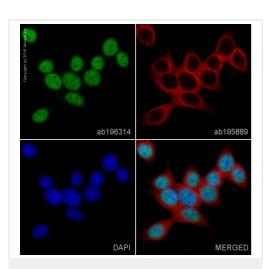
細胞内局在 Nucleus.

### 画像



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-BRG1 antibody [EPNCIR111A] (ab196314) ab196314 staining BRG1 in wild-type HAP1 cells (top panel) and BRG1 knockout HAP1 cells (bottom panel). The cells were fixed with 4% formaldehyde (10min), 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 ab196314 at a 1/500 dilution (shown in green) and <a href="mailto:ab195889">ab195889</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

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



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-BRG1 antibody [EPNCIR111A] (ab196314)

ab196314 staining BRG1 in SW480 cells. 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 overnight at +4°C with ab196314 at 1/1000 dilution (shown in green) and <a href="mailto:ab195889">ab195889</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

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

This product also gave a positive signal under the same testing conditions in SW480 cells fixed with 4% formaldehyde (10 min).



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