abcam

Product datasheet

Anti-BRG1 antibody ab4081

KO 評価済

10 Abreviews 28 References 画像数 5

製品の概要

製品名	Anti-BRG1 antibody
製品の詳細	Rabbit polyclonal to BRG1
由来種	Rabbit
特異性	We have conflicting data about the performance of this antibody in ChIP. Publications have reported positive results with this antibody using ChIP application, however we also have customer data indicating certain batches of this antibody did not work in ChIP in their hands. If you require any further information or assistance please contact Abcam Scientific Support Team.
アプリケーション	**適用あり:** WB **適用なし:** IHC-P
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.
特記事項	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. 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

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab4081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	★★★★★ (4)	1/500 - 1/1000. Detects a band of approximately 235 kDa (predicted molecular weight: 185 kDa).

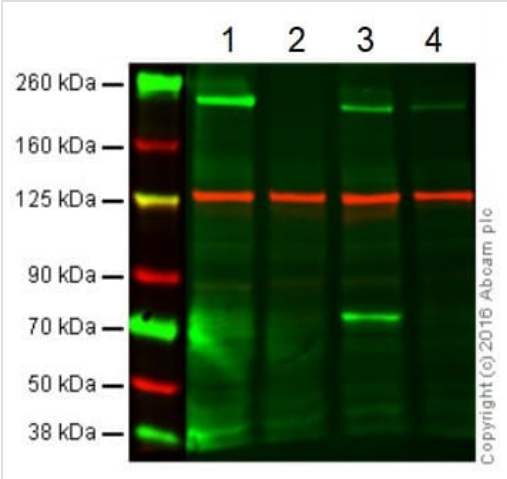
追加情報 Is unsuitable for IHC-P.

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 neuron-specific 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 self-renewal/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



Western blot - Anti-BRG1 antibody (ab4081)

All lanes : Anti-BRG1 antibody (ab4081) at 1/500 dilution

Lane 1 : Wild-type HAP1 cell lysate
Lane 2 : BRG1 knockout HAP1 cell lysate
Lane 3 : HeLa (Human epithelial adenocarcinoma cell line) whole cell lysate
Lane 4 : K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate

Lysates/proteins at 40 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 185 kDa

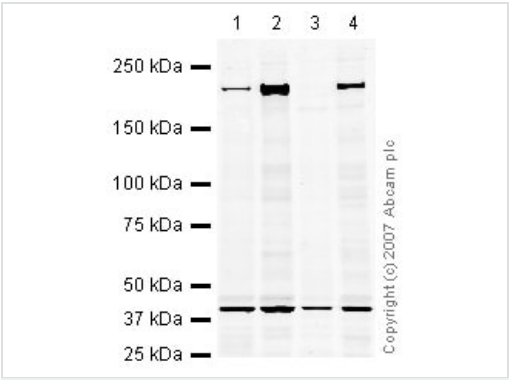
Lanes 1 - 4: Merged signal (red and green).

Green - ab4081 observed at 240 kDa.

Red - loading control, Mouse monoclonal Anti-Vinculin antibody, observed at 124 kDa.

ab4081 was shown to recognize BRG1 when BRG1 knockout samples were used, along with additional cross-reactive bands.

Wild-type and BRG1 knockout samples were subjected to SDS-PAGE. Ab4081 and loading control to Vinculin were diluted at 1/500 and 1/10,000 dilution respectively and incubated overnight at 4C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773** - Green) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776** - Red) secondary antibodies at 1:10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-BRG1 antibody (ab4081)

All lanes : Anti-BRG1 antibody (ab4081) at 1 µg/ml

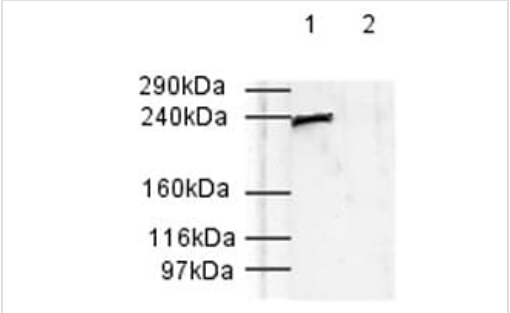
Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate
Lane 2 : Jurkat nuclear extract lysate
Lane 3 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate
Lane 4 : Hep G2 nuclear extract lysate (**ab14660**)

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 185 kDa
Observed band size: 235 kDa
Additional bands at: 40 kDa. We are unsure as to the identity of these extra bands.



Western blot - Anti-BRG1 antibody (ab4081)

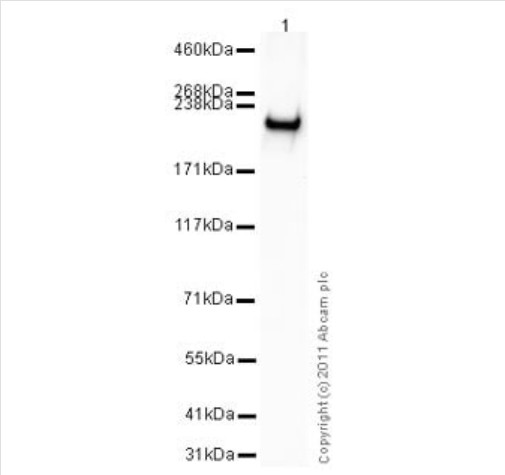
All lanes : Anti-BRG1 antibody (ab4081) at 1/500 dilution

Lane 1 : HeLa (Human epithelial adenocarcinoma cell line) Nuclear extract
Lane 2 : HeLa Nuclear extract with Human BRG1 peptide (**ab13736**) at 1 µg

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab6721**) (Goat anti-rabbit (HRP))

Predicted band size: 185 kDa



Western blot - Anti-BRG1 antibody (ab4081)

Anti-BRG1 antibody (ab4081) at 1/1000 dilution + Recombinant human BRG1 protein (**ab82237**) at 0.1 µg

Secondary

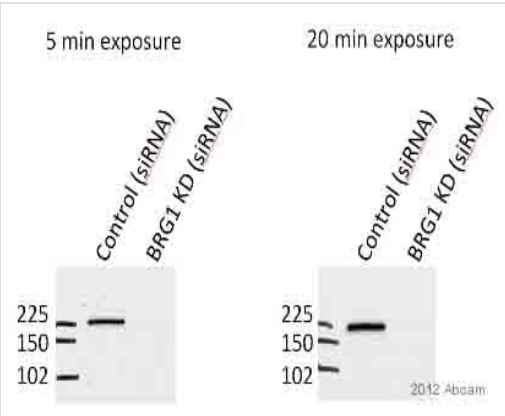
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 185 kDa

Exposure time: 8 minutes



Western blot - Anti-BRG1 antibody (ab4081)

This image is courtesy of an anonymous abreview.

Whole cell lysate prepared from HeLa cells was loaded at 150000 cells.
ab4081 used at a 1/1000 dilution.
The secondary used was an HRP conjugated donkey polyclonal used at a 1/5000 dilution.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.co.jp/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors