abcam

Product datasheet

Anti-SMARCD1 antibody [EPR23170-71] ab245222

敲除验证 重组 RabMAb

9 图像

概述

产品名称	Anti-SMARCD1抗体[EPR23170-71]
描述	兔单克隆抗体[EPR23170-71] to SMARCD1
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, ICC/IF, IP **不适用于:** IHC-P
种属反应性	**与反应:** Mouse, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa, 293T, NIH/3T3 and Neuro-2a lysates. ICC/IF: HeLa and Neuro-2a cells. Flow Cyt (intra): HeLa and NIH/3T3 cells. IP: HeLa and NIH/3T3 cells.
常规说明	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**.

性能

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	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR23170-71

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab245222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 (Intra)		1/500.
WB		1/1000. Detects a band of approximately 58 kDa (predicted molecular weight: 58 kDa).
ICC/IF		1/50.
IP		1/30.

应用说明 Is unsuitable for IHC-P.

靶标

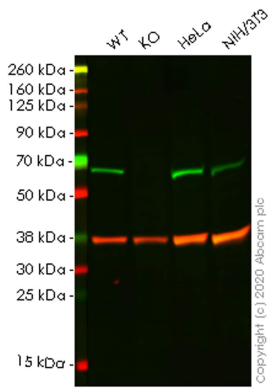
功能 Involved in chromatin remodeling. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism 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 (By similarity). Has a strong influence on the Vitamin D-mediated transcriptional activity from an enhancer Vitamin D receptor element (VDRE). May be a link between mammalian SWI-SNF-like chromatin remodeling complexes and the vitamin D receptor (VDR) heterodimer. Mediates critical interactions between nuclear receptors and the BRG1/SMARCA4 chromatin-remodeling complex for transactivation. 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.

组织特异性 Expressed in all tissues tested, including brain, heart, kidney, liver, lung, muscle, pancreas and placenta.

序列相似性 Belongs to the SMARCD family.
Contains 1 SWIB domain.

细胞定位 Nucleus.

图片



Western blot - Anti-SMARCD1 antibody [EPR23170-71] (ab245222)

All lanes : Anti-SMARCD1 antibody [EPR23170-71] (ab245222) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
Lane 2 : SMARCD1 knockout HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 4 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

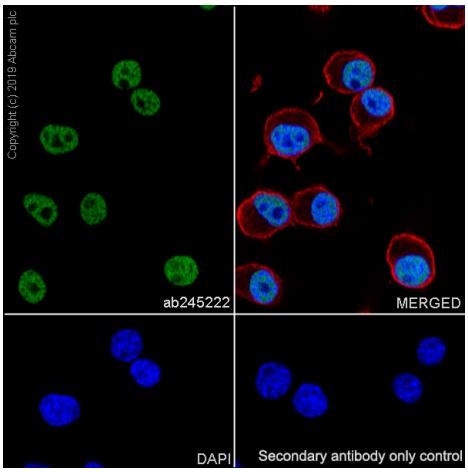
Lysates/proteins at 20 µg per lane.

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

Predicted band size: 58 kDa
Observed band size: 58 kDa

Lanes 1-4: Merged signal (red and green). Green - ab245222 observed at 58 kDa. Red - loading control **ab8245** observed at 36 kDa.

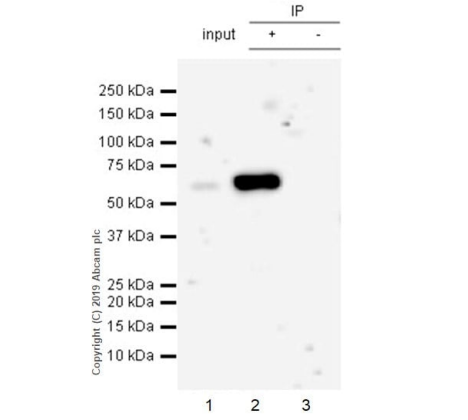
ab245222 Anti-SMARCD1 antibody [EPR23170-71] was shown to specifically react with SMARCD1 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line **ab266458** (knockout cell lysate **ab259143**) was used. Wild-type and SMARCD1 knockout samples were subjected to SDS-PAGE. ab245222 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-SMARCD1 antibody [EPR23170-71] (ab245222)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Neuro-2a (mouse neuroblastoma neuroblast) cells labelling SMARCD1 with ab245222 at 1/50 dilution, followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing nuclear staining in Neuro-2a cells. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

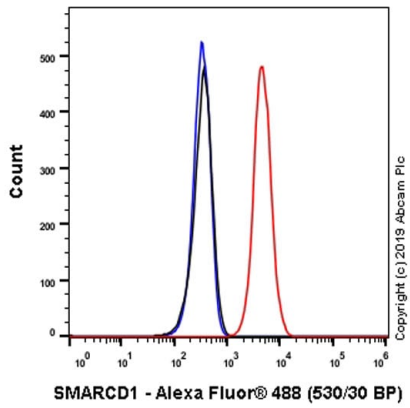


Immunoprecipitation - Anti-SMARCD1 antibody [EPR23170-71] (ab245222)

SMARCD1 was immunoprecipitated from 0.35 mg of NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate with ab245222 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab245222 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used as secondary antibody at 1/5000 dilution.

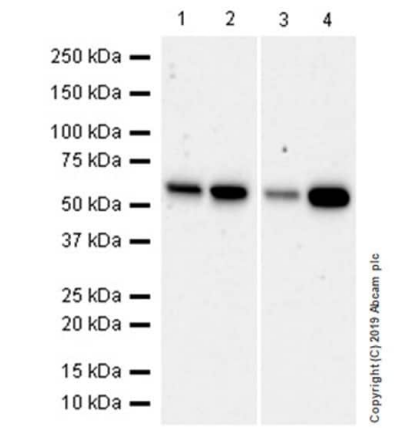
Lane 1: NIH/3T3 whole cell lysate 10 (Input).
Lane 2: ab245222 IP in NIH/3T3 whole cell lysate.
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab245222 in NIH/3T3 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 3 minutes.



Flow Cytometry (Intracellular) - Anti-SMARCD1 antibody [EPR23170-71] (ab245222)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling SMARCD1 with ab245222 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-SMARCD1 antibody [EPR23170-71] (ab245222)

All lanes : Anti-SMARCD1 antibody [EPR23170-71] (ab245222) at 1/1000 dilution

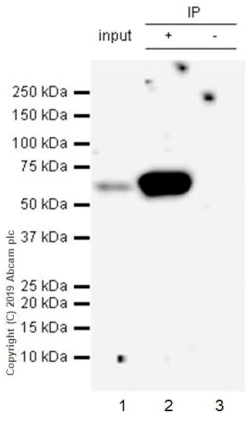
Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg
Lane 2 : HEK-293T (human embryonic kidney epithelial cell) whole cell lysate at 20 µg
Lane 3 : NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 10 µg
Lane 4 : Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate at 20 µg

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 58 kDa
Observed band size: 58 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



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Blocking and dilution buffer and concentration: 5% NFDM/TBST.
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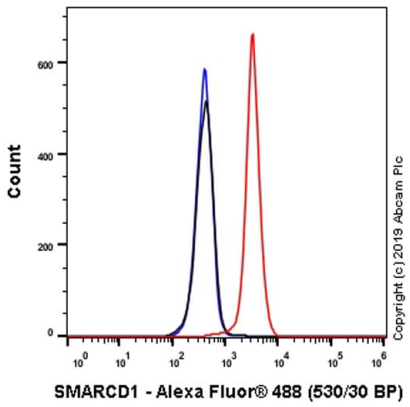

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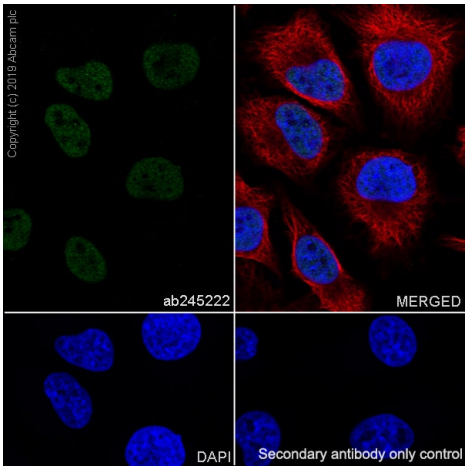

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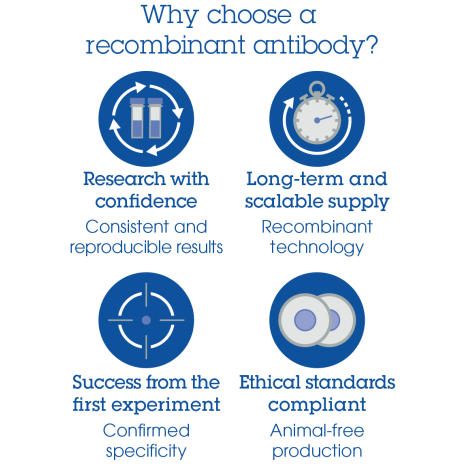
Secondary antibody only control: Secondary antibody is **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Anti-SMARCD1 antibody [EPR23170-71] (ab245222)

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