abcam

Product datasheet

Anti-SMARCC1/BAF155 antibody [EPR12389] ab172636

KO VALIDATED Recombinant RabMAb

4 Images

Overview

Product name	Anti-SMARCC1/BAF155 antibody [EPR12389]
Description	Rabbit monoclonal [EPR12389] to SMARCC1/BAF155
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF **Unsuitable for:** Flow Cyt,IHC-P or IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human SMARCC1/BAF155 aa 1-100 (Cysteine residue). The exact sequence is proprietary. Database link: **Q92922**
Positive control	NTera2/D1, HeLa, HEK-293 and Jurkat whole cell lysate (**ab7899**). HeLa cells.
General notes	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**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR12389
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab172636 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 123 kDa.
ICC/IF		1/100 - 1/250.

Application notes Is unsuitable for Flow Cyt,IHC-P or IP.

Target

Function Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). May stimulate the ATPase activity of the catalytic subunit of the complex. 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. 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.

Tissue specificity Expressed in brain, heart, muscle, placenta, lung, liver, muscle, kidney and pancreas.

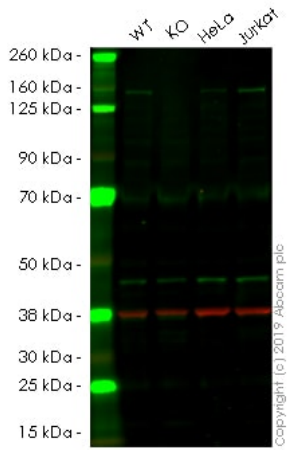
Sequence similarities Belongs to the SMARCC family.
Contains 1 SANT domain.
Contains 1 SWIRM domain.

Post-translational modifications Phosphorylated on undefined residues at the G2/M transition by ERK1 and other kinases. This may contribute to cell cycle specific inactivation of remodeling complexes containing the phosphorylated protein.

Cellular localization Nucleus.

Images

Images



Western blot - Anti-SMARCC1/BAF155 antibody [EPR12389] (ab172636)

All lanes : Anti-SMARCC1/BAF155 antibody [EPR12389] (ab172636) at 1/5000 dilution

Lane 1 : Wild-type HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate
Lane 2 : SMARCC1 knockout HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate
Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 4 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

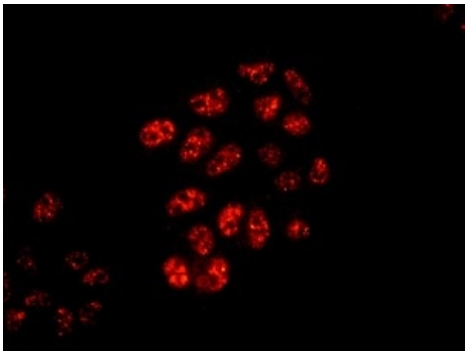
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 123 kDa
Observed band size: 123 kDa

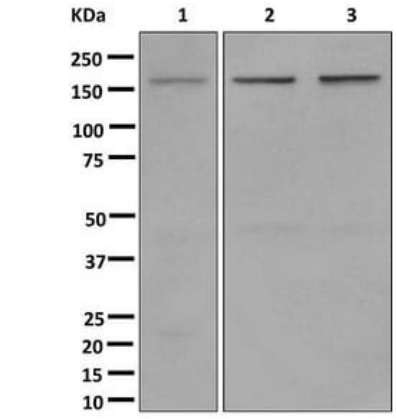
Lanes 1 - 4: Merged signal (red and green). Green - ab172636 observed at 123 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab172636 was shown to specifically react with SMARCC1 in wild-type HEK-293 cells as signal was lost in SMARCC1 knockout cells. Wild-type and SMARCC1 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab172636 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-SMARCC1/BAF155 antibody [EPR12389] (ab172636)

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells labeling SMARCC1/BAF155 with ab172636 at a 1/100 dilution.



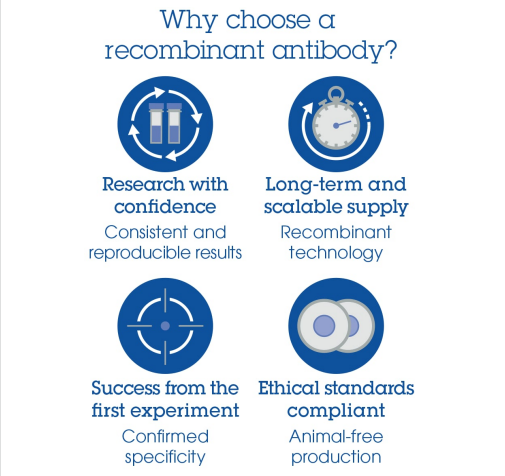
Western blot - Anti-SMARCC1/BAF155 antibody [EPR12389] (ab172636)

All lanes : Anti-SMARCC1/BAF155 antibody [EPR12389] (ab172636) at 1/1000 dilution

Lane 1 : NTera2/D1 cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 123 kDa



Anti-SMARCC1/BAF155 antibody [EPR12389]

(ab172636)

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

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