abcam

Product datasheet

Anti-SMARCC1/BAF155 antibody ab72503

2 References 3 Images

Overview

Product name	Anti-SMARCC1/BAF155 antibody
Description	Rabbit polyclonal to SMARCC1/BAF155
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB, IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Horse, Dog, Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Elephant
Immunogen	Synthetic peptide corresponding to Human SMARCC1/BAF155 (C terminal). Database link: **NP_003065.2**
Positive control	HeLa whole cell lysate (**ab150035**).
General notes	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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Purification notes	ab72503 was affinity purified using an epitope specific to SMARCC1/BAF155 immobilized on solid support.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab72503 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
ICC/IF		Use a concentration of 5 µg/ml.
WB		1/2000 - 1/10000. Detects a band of approximately 160 kDa (predicted molecular weight: 123 kDa).
IP		Use at 2-5 µg/mg of lysate.

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.

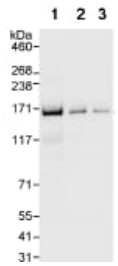
Tissue specificity Expressed in brain, heart, muscle, placenta, lung, liver, muscle, kidney and pancreas.

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



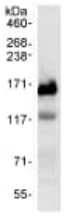
Western blot - Anti-SMARCC1/BAF155 antibody (ab72503)

All lanes : Anti-SMARCC1/BAF155 antibody (ab72503) at 0.04 µg/ml

Lane 1 : HeLa whole cell lysate at 50 µg
Lane 2 : HeLa whole cell lysate at 15 µg
Lane 3 : HeLa whole cell lysate at 5 µg

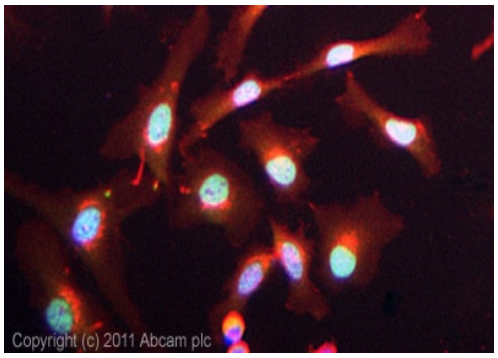
Predicted band size: 123 kDa
Observed band size: 160 kDa

Exposure time: 1 second



Immunoprecipitation - Anti-SMARCC1/BAF155 antibody (ab72503)

Detection of SMARCC1/BAF155 by Western Blot of Immunprecipitate.
ab72503 at 1µg/ml staining SMARCC1/BAF155 in HeLa whole cell lysate immunoprecipitated using ab72503 at 3µg/mg lysate (1 mg/IP; 20% of IP loaded/lane).
Detection: Chemiluminescence with exposure time of 1 second.



Immunocytochemistry/ Immunofluorescence - Anti-SMARCC1/BAF155 antibody (ab72503)

ICC/IF image of ab72503 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab72503, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h.Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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