

Anti-SMARCC1/BAF155 antibody ab126180

[1 References](#) [13 Images](#)

Overview

Product name	Anti-SMARCC1/BAF155 antibody
Description	Rabbit polyclonal to SMARCC1/BAF155
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF, ChIP, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment corresponding to Human SMARCC1/BAF155 aa 808-1052 (C terminal).
Positive control	ChIP: MCF7 chromatin extract; WB: HeLa, Neuro-2a, C8-D30, NIH/3T3, RAW 264.7, C2C12, HepG2, A431, HEK-293T lysate; IHC-P: BT483, RT2 and C2C12 xenograft, rat hind brain, mouse prostate and duodenum; IF: HeLa whole cells; IP: HEK-293T lysate.
General notes	<p>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.</p> <p>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</p>

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 79.99% PBS, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab126180 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		1/500 - 1/20000. Predicted molecular weight: 123 kDa.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.
ChIP		Use at an assay dependent concentration.
IP		1/100 - 1/500.

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.

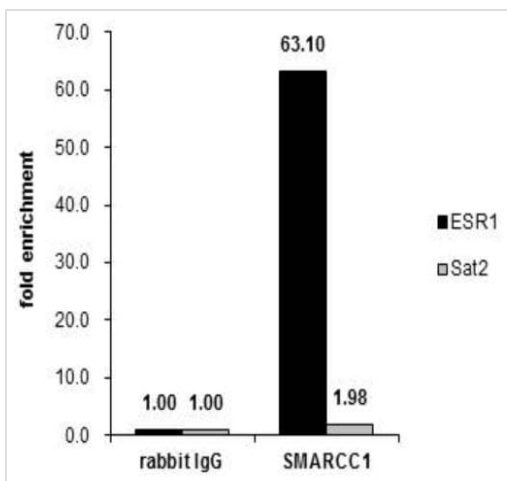
Post-translational modifications

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

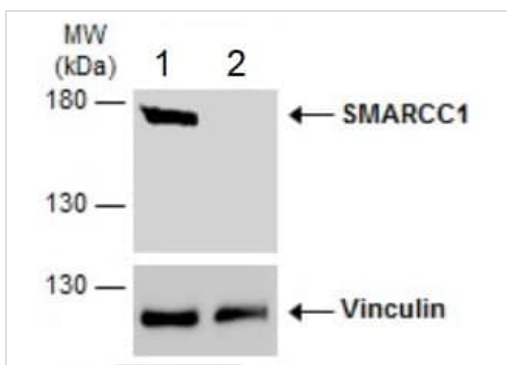
Nucleus.

Images



ChIP - Anti-SMARCC1/BAF155 antibody (ab126180)

Cross-linked ChIP was performed with MCF7 (human breast adenocarcinoma cell line) chromatin extract treated with B-estradiol (10 nM for 45 min) and 5 µg of either control rabbit IgG or ab126180. The precipitated DNA was detected by PCR with primer set targeting to ESR1 or Sat2.



Western blot - Anti-SMARCC1/BAF155 antibody (ab126180)

All lanes : Anti-SMARCC1/BAF155 antibody (ab126180) at 1/5000 dilution

Lane 1 : Wild-Type HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : SMARCC1/BAF155 Knockout HeLa cell lysate

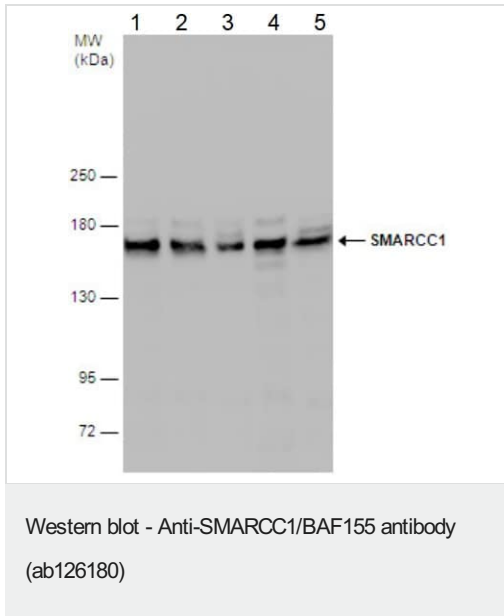
Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG

Predicted band size: 123 kDa

5% SDS-PAGE



All lanes : Anti-SMARCC1/BAF155 antibody (ab126180) at 1/1000 dilution

Lane 1 : Neuro-2a (mouse neuroblastoma cell line) whole cell lysate

Lane 2 : C8-D30 (mouse astrocyte type III cerebellum cell line) whole cell lysate

Lane 3 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lane 4 : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 5 : C2C12 (mouse myoblast cell line) whole cell lysate

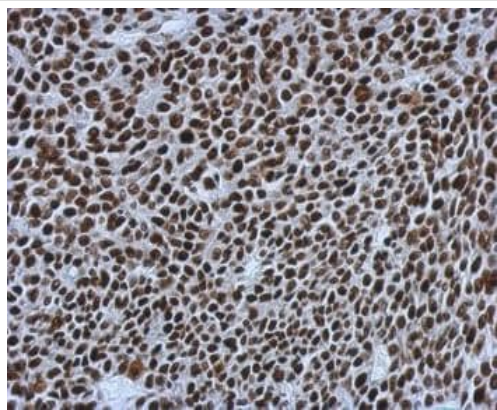
Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 123 kDa

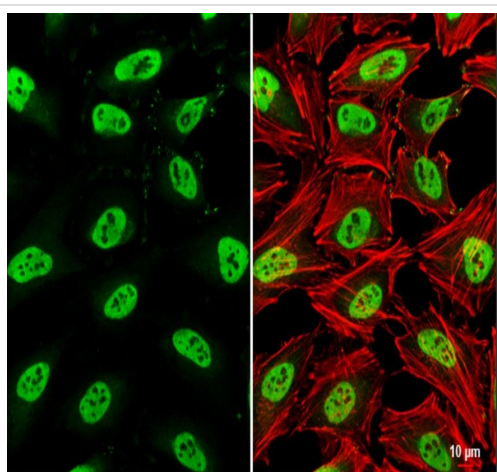
5% SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMARCC1/BAF155 antibody (ab126180)

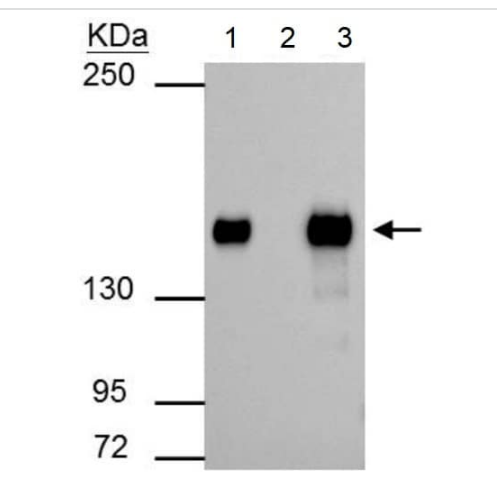
Immunohistochemical analysis of paraffin-embedded human BT483 xenograft staining SMARCC1/BAF155 protein using ab126180 at 1/500 dilution.

Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.



Immunocytochemistry/ Immunofluorescence - Anti-SMARCC1/BAF155 antibody (ab126180)

Immunofluorescence analysis of 4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell labeling SMARCC1/BAF155 protein (green) with ab126180 at 1/500 dilution. Red: phalloidin, a cytoskeleton marker, at 1/200 dilution. Scale bar= 10 μ m.



Immunoprecipitation - Anti-SMARCC1/BAF155 antibody (ab126180)

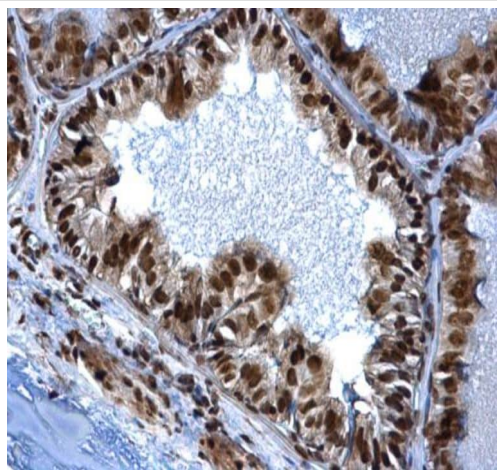
ab126180 immunoprecipitates SMARCC1 protein using HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate.

IP Sample:

- 1- HEK-293T whole cell lysate, 30 μ g;
- 2- Control with 2.5 μ g of pre-immune rabbit IgG;
- 3- Immunoprecipitation of SMARCC1 by 2.5 μ g of ab126180.

5% SDS-PAGE

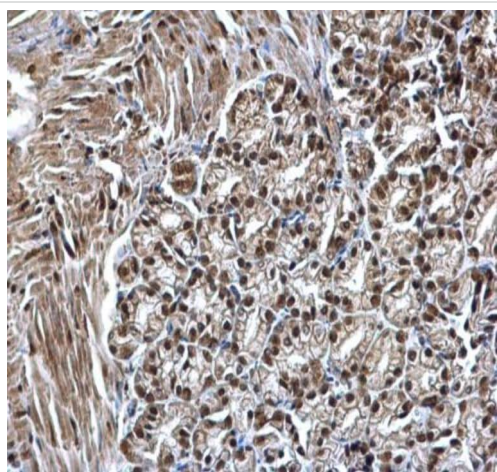
The immunoprecipitated SMARCC1 protein was detected by ab126180 at 1/1000 dilution, followed by anti-rabbit IgG (HRP) antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMARCC1/BAF155 antibody (ab126180)

Immunohistochemical analysis of paraffin-embedded mouse prostate staining SMARCC1/BAF155 protein at nucleus using ab126180 at 1/500 dilution.

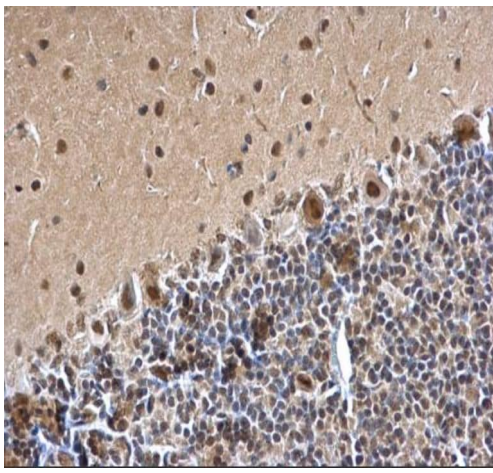
Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMARCC1/BAF155 antibody (ab126180)

Immunohistochemical analysis of paraffin-embedded mouse duodenum staining SMARCC1/BAF155 protein at nucleus using ab126180 at 1/500 dilution.

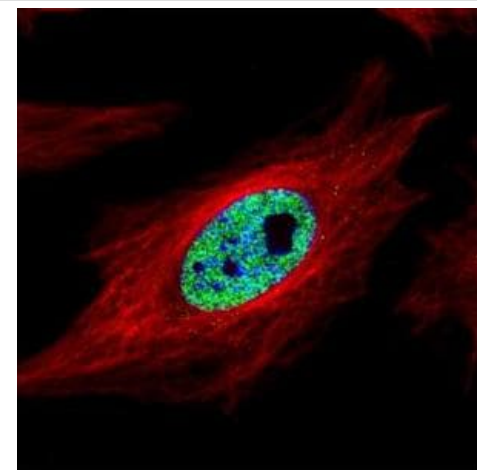
Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMARCC1/BAF155 antibody (ab126180)

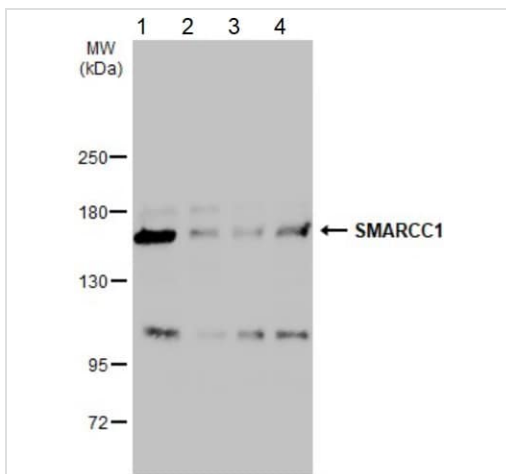
Immunohistochemical analysis of paraffin-embedded rat hind brain staining SMARCC1/BAF155 protein at nucleus using ab126180 at 1/500 dilution.

Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.



Immunocytochemistry/ Immunofluorescence - Anti-SMARCC1/BAF155 antibody (ab126180)

Confocal immunofluorescence analysis of paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell labeling SMARCC1/BAF155 protein (green) with ab126180 at 1/500 dilution. Red: Alpha-tubulin filaments, at 1/2000 dilution.



Western blot - Anti-SMARCC1/BAF155 antibody (ab126180)

All lanes : Anti-SMARCC1/BAF155 antibody (ab126180) at 1/2000 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 2 : A431 (human epidermoid carcinoma cell line) whole cell lysate

Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 4 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

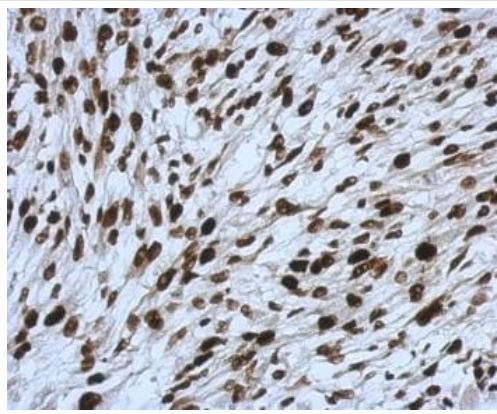
Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 123 kDa

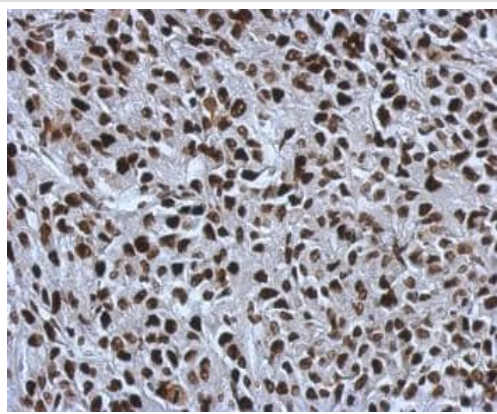
5% SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMARCC1/BAF155 antibody (ab126180)

Immunohistochemical analysis of paraffin-embedded C2C12 (mouse myoblast cell line) xenograft staining SMARCC1/BAF155 protein using ab126180 at 1/500 dilution.

Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMARCC1/BAF155 antibody (ab126180)

Immunohistochemical analysis of paraffin-embedded RT2 xenograft staining SMARCC1/BAF155 protein using ab126180 at 1/500 dilution.

Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.

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