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Smarcc1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20898c

Specification

Smarcc1 Antibody (C-term) - Product Information

Application	**WB, IF,E**
Primary Accession	Q92922
Other Accession	P97496
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**

Smarcc1 Antibody (C-term) - Additional Information

Gene ID 6599

Other Names
SWI/SNF complex subunit SMARCC1, BRG1-associated factor 155, SWI/SNF complex 155 kDa subunit, SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 1, SWI3-related protein, BAF155, Smarcc1, Baf155, Srg3

Target/Specificity
This Smarcc1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 963-997 amino acids from the C-terminal region of mouse Smarcc1.

Dilution
WB~~1:1000
IF~~1:25
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Smarcc1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Smarcc1 Antibody (C-term) - Protein Information

Name SMARCC1 (HGNC:11104)

Synonyms BAF155

Function Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner. May stimulate the ATPase activity of the catalytic subunit of the complex (PubMed:10078207, PubMed:29374058). 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 postmitotic 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 postmitotic 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).

Cellular Location
Nucleus. Cytoplasm

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

Smarcc1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Smarcc1 Antibody (C-term) - Images

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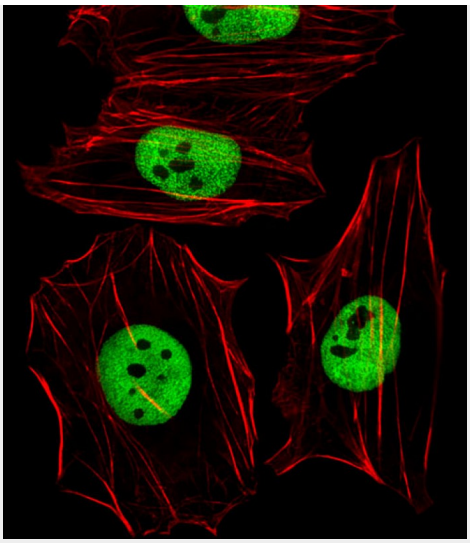
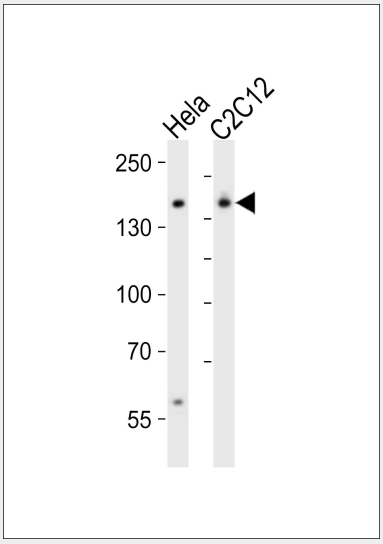


Fluorescent image of Hela cells stained with Smarcc1 Antibody (C-term) (Cat#AP20898c). AP20898c was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from Hela, mouse C2C12 cell line (from left to right), using Smarcc1 Antibody (C-term) (Cat. #AP20898c). AP20898c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

Smarcc1 Antibody (C-term) - Background

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 (By similarity). 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.

Smarcc1 Antibody (C-term) - References

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Kim J.K.,et al.Mol. Cell. Biol. 21:7787-7795(2001).
Lessard J.,et al.Neuron 55:201-215(2007).
Sweet S.M.,et al.Mol. Cell. Proteomics 8:904-912(2009).