

### (Mouse) Smarcc1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20898c

# **Specification**

## (Mouse) Smarcc1 Antibody (C-term) - Product Information

Application IF, WB,E Primary Accession P97496

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 122890

## (Mouse) Smarcc1 Antibody (C-term) - Additional Information

### **Gene ID 20588**

#### **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 (Mouse) 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**

IF~~1:25

WB~~1:1000

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**

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

# (Mouse) Smarcc1 Antibody (C-term) - Protein Information

### Name Smarcc1



## Synonyms Baf155, Srg3

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. 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.

**Cellular Location** 

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q92922}

**Tissue Location** 

Highly expressed in adult brain, testis and thymus.

# (Mouse) Smarcc1 Antibody (C-term) - Protocols

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

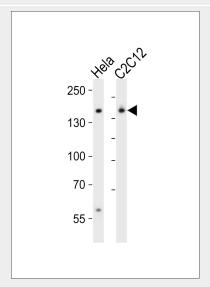
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

(Mouse) Smarcc1 Antibody (C-term) - Images





Fluorescent image of Hela cells stained with (Mouse) 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.

## (Mouse) 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.

# (Mouse) Smarcc1 Antibody (C-term) - References

Jeon S.H., et al.J. Exp. Med. 185:1827-1836(1997). 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).