

**SMARCC1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5595**

**Specification**

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**SMARCC1 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O92922</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=123;M=123,120 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**SMARCC1 Antibody (C-term) - Additional Information**

**Gene ID** 6599

**Antigen Region**  
963-997

**Other Names**

SWI/SNF complex subunit SMARCC1, BRG1-associated factor 155, BAF155, SWI/SNF complex 155 kDa subunit, SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 1, SMARCC1, BAF155

**Dilution**

WB~~1:2000

**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 human SMARCC1.

**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:<a href="http://www.uniprot.org/citations/10078207" target="\_blank">10078207</a>, PubMed:<a href="http://www.uniprot.org/citations/29374058" target="\_blank">29374058</a>). 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

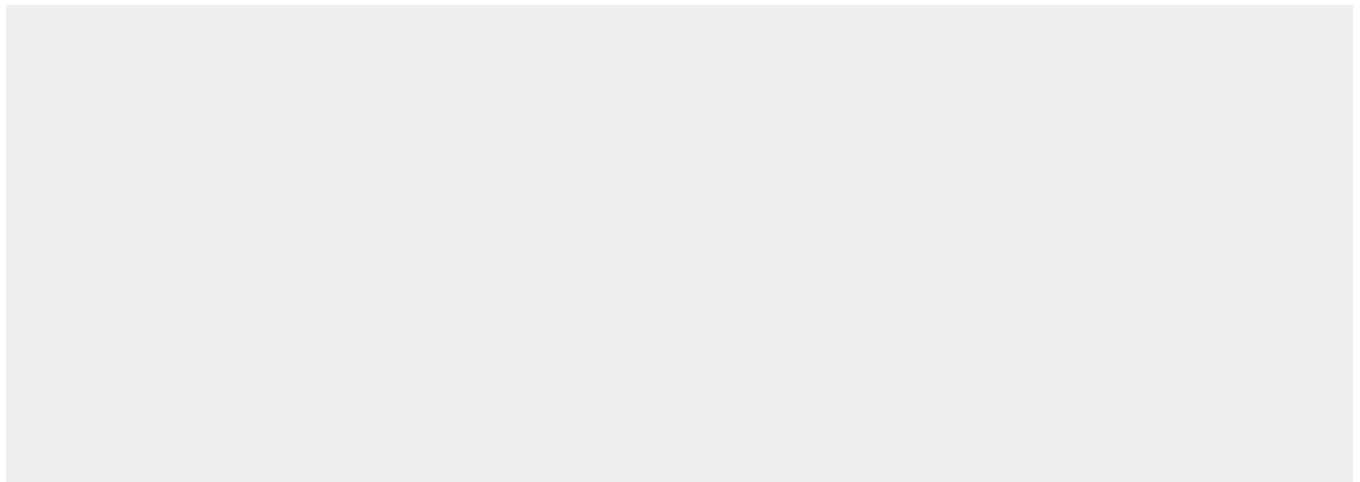
**Tissue Location**

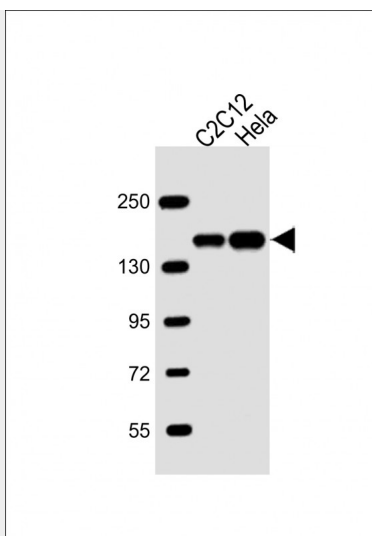
Expressed in brain, heart, muscle, placenta, lung, liver, muscle, kidney and pancreas

**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 Cytometry](#)
- [Cell Culture](#)

**SMARCC1 Antibody (C-term) - Images**



All lanes : Anti-SMARCC1 Antibody (C-term) at 1:2000 dilution Lane 1: C2C12 whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 123 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

### **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. 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 (By similarity).

### **SMARCC1 Antibody (C-term) - References**

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 Bienvenut W.V.,et al.Submitted (JUL-2007) to UniProtKB.  
 Sif S.,et al.Genes Dev. 12:2842-2851(1998).  
 Kitagawa H.,et al.Cell 113:905-917(2003).  
 Brill L.M.,et al.Anal. Chem. 76:2763-2772(2004).