

(Mouse) Smarcc1 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5409

Specification

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

Application	IF, WB,E
Primary Accession	P97496
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	M=123,120;H=123;R=121 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

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

Gene ID 20588

Antigen Region
963-997

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

Dilution

IF~~1:25
WB~~1:1000

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 human (Mouse) Smarcc1.

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

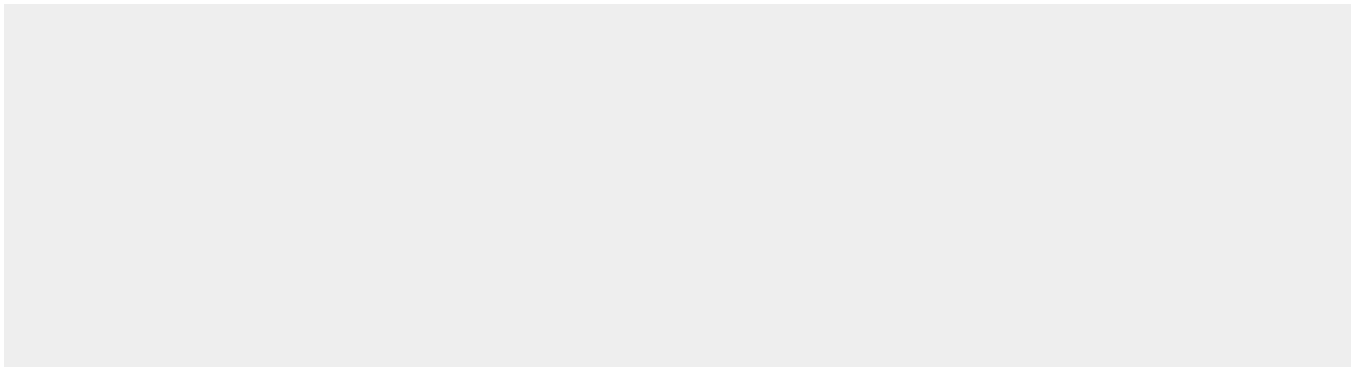
Highly expressed in adult brain, testis and thymus.

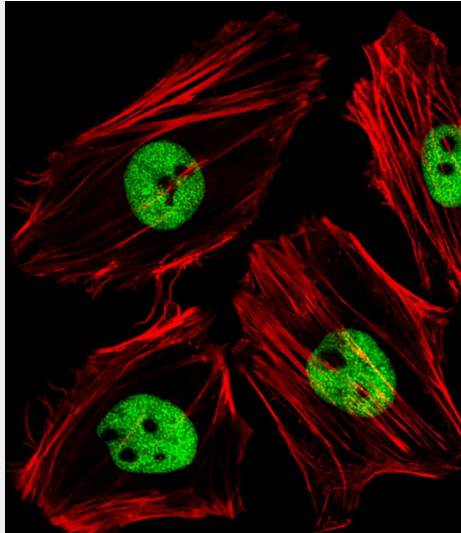
(Mouse) Smarcc1 Antibody (C-term) - Protocols

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

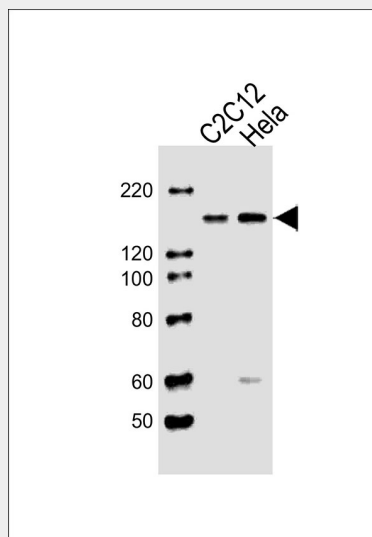
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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





Fluorescent image of HeLa cells stained with (Mouse) Smarcc1 Antibody (C-term)(Cat#AW5409). AW5409 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).



All lanes : Anti-Smarcc1 Antibody (C-term) at 1:1000 dilution Lane 1: C2C12 whole cell lysates Lane 2: HeLa whole cell lysates 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% NFDM/TBST.

(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).