10320 Camino Santa Fe, Suite G
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(Mouse) Smarcc1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5410

Specification

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

Application	**WB, IHC-P, IF,E**
Primary Accession	P97496
Other Accession	Q92922
Reactivity	**Human, Mouse, 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
783-817

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
WB~~1:1000
IHC-P~~1:25
IF~~1:25

Target/Specificity
This Mouse Smarcc1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 783-817 amino acids from the C-terminal region of 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.

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(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 Cytomety
- Cell Culture

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

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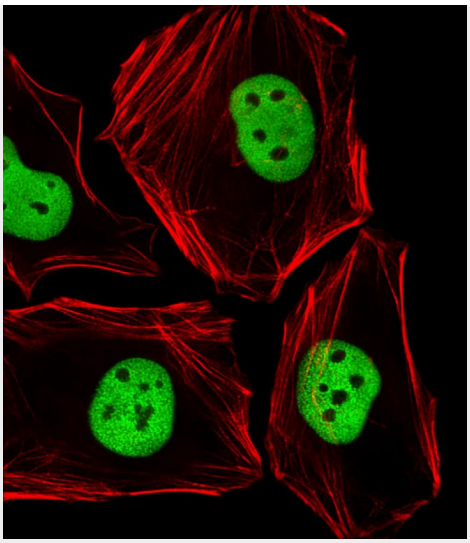
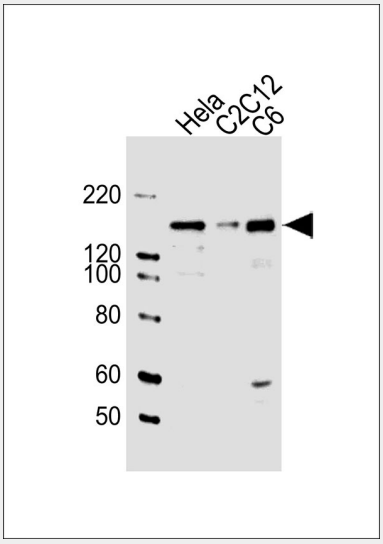


Fluorescent image of Hela cells stained with (Mouse) Smarcc1 Antibody (C-term)(Cat#AW5410). AW5410 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



All lanes : Anti-Smarcc1 Antibody (C-term) at 1:1000 dilution Lane 1: Hela whole cell lysates Lane 2: C2C12 whole cell lysates Lane 3: C6 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 123 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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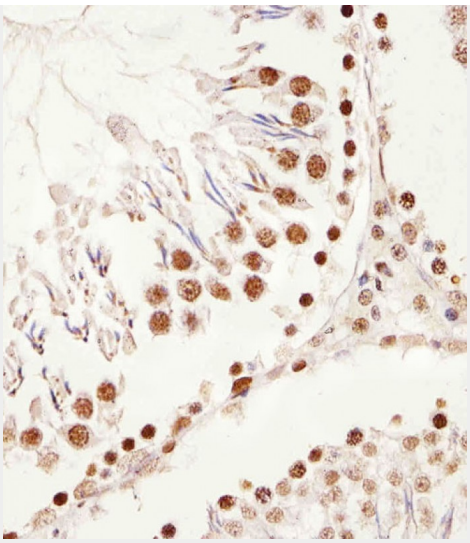

Immunohistochemical analysis of paraffin-embedded M. testis section using (Mouse) Smarcc1 Antibody (C-term)(Cat#AW5410). AW5410 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

(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

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Kim J.K.,et al.Mol. Cell. Biol. 21:7787-7795(2001).
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