

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

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5410

#### **Specification**

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

Application IF, WB, IHC-P,E

Primary Accession P97496
Other Accession O92922

Reactivity Human, Mouse,

Rat

Host Rabbit Clonality Polyclonal

Calculated MW M=123,120;H=12

3;R=121 KDa

Isotype Rabbit Ig
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**

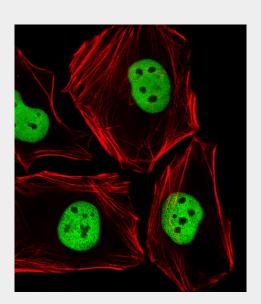
IF~~1:25 WB~~1:1000 IHC-P~~1:25

#### Target/Specificity

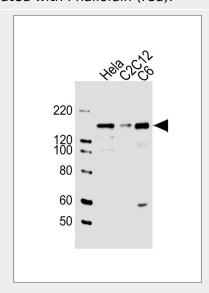
This Mouse Smarcc1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 783-817 amino acids from the C-terminal region of Mouse Smarcc1.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This



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 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: Hela whole cell



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

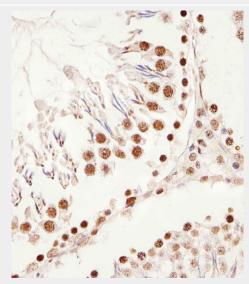
Name Smarcc1

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

lysates Lane 2: C2C12 whole cell lysates Lane 3: C6 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.

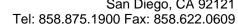


Immunohistochemical analysis of paraffin-embedded M. testis section using (Mouse) Smarcc1 Antibody (C-term)(Cat#AW5410). AW5410 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

# (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







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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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).