10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SMARCC1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52766

Specification

SMARCC1 Antibody - Product Information

Application	**WB**
Primary Accession	Q92922
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**155 KDa**

SMARCC1 Antibody - Additional Information

Gene ID 6599

Other Names
AI115498;BAF 155;BAF155;BRG 1 associated factor 155;BRG1 associated factor 155;BRG1-associated factor 155;Chromatin remodeling complex BAF155 subunit;CRACC 1;CRACC1; Mammalian chromatin remodeling complex BRG 1 associated factor 155;Mammalian chromatin remodeling complex BRG1 associated factor 155;Rsc 8;Rsc8;SMARC C1;SMARCC 1;SMARCC1; SMRC1_HUMAN;SRG 3;SRG3;SWI 3;SWI/SNF complex 155 kDa subunit;SWI/SNF related matrix associated actin dependent regulator of chromatin c1;SWI/SNF related matrix associated actin dependent regulator of chromatin subfamily c member 1;SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 1;SWI3.

Dilution
WB~~1:1000

Format
Purified mouse monoclonal in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

SMARCC1 Antibody - 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:10078207, PubMed:29374058). 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

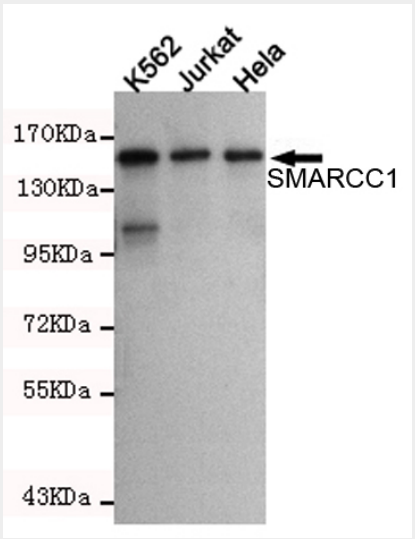
Tissue Location
Expressed in brain, heart, muscle, placenta, lung, liver, muscle, kidney and pancreas

SMARCC1 Antibody - 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

SMARCC1 Antibody - Images



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Western blot detection of SMARCC1 in K562,Jurkat and Hela cell lysates using SMARCC1 mouse mAb (1:1000 diluted).Predicted band size:155KDa.Observed band size:155KDa.

SMARCC1 Antibody - 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 - References

Wang W.,et al.Genes Dev. 10:2117-2130(1996).
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).