

(Mouse) Smarcd3 Antibody (Center) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21168a

Specification

(Mouse) Smarcd3 Antibody (Center) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>Q6P9Z1</u> Human, Mouse Rabbit polyclonal Rabbit IgG 54986

(Mouse) Smarcd3 Antibody (Center) - Additional Information

Gene ID 66993

Other Names

SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 3, 60 kDa BRG-1/Brm-associated factor subunit C, BRG1-associated factor 60C, BAF60C, mBAF60c, Smarcd3, Baf60c

Target/Specificity

This Mouse Smarcd3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 158-193 amino acids from the Central region of Mouse Smarcd3.

Dilution WB~~1:4000

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) Smarcd3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

(Mouse) Smarcd3 Antibody (Center) - Protein Information

Name Smarcd3

Synonyms Baf60c



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 (PubMed:22952240, PubMed:26601204). Stimulates nuclear receptor mediated transcription. 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 (PubMed: 17640523).

Cellular Location Nucleus {ECO:0000250|UniProtKB:Q6STE5}.

Tissue Location Ubiquitously expressed.

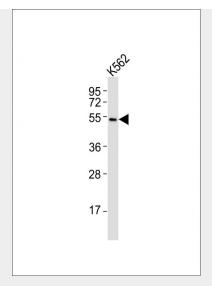
(Mouse) Smarcd3 Antibody (Center) - Protocols

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

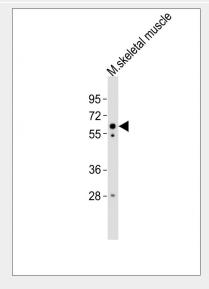
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

(Mouse) Smarcd3 Antibody (Center) - Images





Anti-(Mouse) Smarcd3 Antibody (Center) at 1:1000 dilution + K562 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 : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-Smarcd3 Antibody (Center) at 1:4000 dilution + mouse skeletal muscle lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

(Mouse) Smarcd3 Antibody (Center) - Background

Plays a role in ATP dependent nucleosome remodeling by SMARCA4 containing complexes. Stimulates nuclear receptor mediated transcription (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) Smarcd3 Antibody (Center) - References

Carninci P., et al.Science 309:1559-1563(2005). Debril M.-B., et al.J. Biol. Chem. 279:16677-16686(2004). Lessard J., et al.Neuron 55:201-215(2007).