

(Mouse) Smarcd3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21168a

Product Information

Application	WB, E
Primary Accession	<u>Q6P9Z1</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB51970
Calculated MW	54986

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 E~~Use at an assay dependent concentration.
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.

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: <u>17640523</u>).
Cellular Location	Nucleus {ECO:0000250 UniProtKB:Q6STE5}.
Tissue Location	Ubiquitously expressed.

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.

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).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.