



## Rabbit Anti-SMARCD3 antibody

SL9479R

<b>Product Name:</b>	SMARCD3
<b>Chinese Name:</b>	肌动蛋白依赖染色质调控因子SMARCD3蛋白抗体
<b>Alias:</b>	60 kDa BRG 1/Brm associated factor subunit C; 60 kDa BRG-1/Brm-associated factor subunit C; BAF60C; BRG1 associated factor 60C; BRG1-associated factor 60C; CRACD3; MGC111010; Rsc6p; Smarcd3; SMRD3_HUMAN; SWI/SNF related matrix associated actin dependent regulator of chromatin subfamily d member 3; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 3.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Zebrafish,Sheep,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	55kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human SMARCD3:101-200/483
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	SMARCD3, is a member of the SMARCD family and contains one SWIB domain. Two isoforms, isoform 1 and isoform 2 exist due to alternative splicing events. Both isoforms are expressed in placenta, salivary gland, kidney, brain, trachea, uterus, prostate, testis,

thyroid, spleen and heart, while isoform 1 is also expressed in adipose tissue and skeletal muscle. Localizing to the nucleus, SMARCD3 is a component of the ATP-dependent chromatin remodeling complex SNF/SWI and is believed to play a role in nucleosome remodeling. SMARCD3 also plays an important role in the regulation of muscle development. In mice, the silencing of the gene encoding SMARCD3 leads to defects in heart morphogenesis. In addition, both isoforms of SMARCD3 directly interact with and function as coactivators for several transcription factors.

**Function:**

Plays a role in ATP dependent nucleosome remodeling by SMARCA4 containing complexes. 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 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 in regulating the activity of genes essential for dendrite growth (By similarity).

**Subunit:**

Component of the BAF complex, which includes at least actin (ACTB), ARID1A, ARID1B/BAF250, SMARCA2, SMARCA4/BRG1/BAF190A, ACTL6A/BAF53, ACTL6B/BAF53B, SMARCE1/BAF57, SMARCC1/BAF155, SMARCC2/BAF170, SMARCB1/SNF5/INI1, and one or more of SMARCD1/BAF60A, SMARCD2/BAF60B, or SMARCD3/BAF60C. In muscle cells, the BAF complex also contains DPF3. Interacts with SMARCA4/BRG1/BAF190A, the catalytic subunit of the SWI/SNF related nucleosome-remodeling complexes BRG1(I) and BRG1(II). The precise distribution of the related SMARCD1, SMARCD2 and SMARCD3 proteins among these and other SWI/SNF nucleosome-remodeling complexes is not fully known. Also interacts with several nuclear receptors including PPARG/NR1C3, RXRA/NR1F1, ESR1, NR5A1, NR5A2/LRH1 and other transcriptional activators including the HLH protein SREBF1/SREBP1 and the homeobox protein PBX1. May allow recruitment of Swi/SNF containing complexes specifically to promoters where these factors are located. Component of neural progenitors-specific chromatin remodeling complex (npBAF complex) composed of at least, ARID1A/BAF250A or ARID1B/BAF250B, SMARCD1/BAF60A, SMARCD3/BAF60C, SMARCA2/BRM/BAF190B, SMARCA4/BRG1/BAF190A, SMARCB1/BAF47, SMARCC1/BAF155, SMARCE1/BAF57, SMARCC2/BAF170, PHF10/BAF45A, ACTL6A/BAF53A and actin. Component of neuron-specific chromatin remodeling complex (nBAF complex) composed of at

least, ARID1A/BAF250A or ARID1B/BAF250B, SMARCD1/BAF60A, SMARCD3/BAF60C, SMARCA2/BRM/BAF190B, SMARCA4/BRG1/BAF190A, SMARCB1/BAF47, SMARCC1/BAF155, SMARCE1/BAF57, SMARCC2/BAF170, DPF1/BAF45B, DPF3/BAF45C, ACTL6B/BAF53B and actin (By similarity).

**Subcellular Location:**

Nucleus.

**Tissue Specificity:**

Isoform 2 and isoform 1 are expressed in brain, heart, kidney, placenta, prostate, salivary gland, spleen, testis, thyroid, trachea and uterus. Isoform 1 is also expressed in skeletal muscle and adipose tissue.

**Similarity:**

Belongs to the SMARCD family.

Contains 1 SWIB domain.

**SWISS:**

Q6STE5

**Gene ID:**

6604

**Database links:**

[Entrez Gene: 6604](#)Human

[Entrez Gene: 66993](#)Mouse

[Entrez Gene: 296732](#)Rat

[Omim: 601737](#)Human

[SwissProt: Q6STE5](#)Human

[SwissProt: Q6P9Z1](#)Mouse

[Unigene: 647067](#)Human

[Unigene: 436539](#)Mouse

[Unigene: 20043](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.