



Rabbit Anti-SMARCA2 antibody

SL6402R

Product Name:	SMARCA2
Chinese Name:	ATP依赖解旋酶SMARCA2抗体
Alias:	BRM; ATP dependent helicase SMARCA2; BAF190; BRM; Global transcription activator homologous sequence; hBRM; hSNF2a; Possible global transcription activator SNF2L2; SMARCA2; SMCA2_HUMAN; SNF2 alpha; SNF2 like 2; SNF2/SWI2 like protein 2; SNF2A; SNF2LA; Sth1p; Sucrose nonfermenting 2 like protein 2; SWI/SNF related matrix associated actin dependent regulator of chromatin subfamily a member 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	230kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SMARCA2/BRM:1401-1590/1590
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	A transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. SMARCA2 / BRM belongs to the SNF2/RAD54 helicase

family, is a homologue of the *Saccharomyces cerevisiae* SWI2/SNF2 and *Drosophila* brahma proteins. It contains a methyl lysine containing bromo domain and an HSA domain. The yeast protein SNF2, also known as SWI2, is involved in transcriptional activation of numerous genes. It contains a domain that is highly conserved among several known helicases and is required for transcriptional activity. SNF2/SWI2 is highly homologous to the *Drosophila* protein 'brahma' (brm). Although the 2 proteins show nuclear localization during interphase, they are excluded from the condensed chromosomes during mitosis. They found that the level of BRM, but not BRG1, was strongly reduced during mitosis. Phosphorylation of hbrm and BRG1 did not disrupt their association with SNF5 but correlated with a decreased affinity for the nuclear structure in early M phase.

Function:

Transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. 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).

Subunit:

Component of the BAF complex.

Subcellular Location:

Nucleus.

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

Similarity:

Belongs to the SNF2/RAD54 helicase family.

Contains 1 bromo domain.

Contains 1 helicase ATP-binding domain.

Contains 1 helicase C-terminal domain.

Contains 1 HSA domain.

SWISS:
P51531

Gene ID:
6595

Database links:

[Entrez Gene: 6595](#)Human

[Entrez Gene: 67155](#)Mouse

[Entrez Gene: 361745](#)Rat

[Ovim: 600014](#)Human

[SwissProt: P51531](#)Human

[SwissProt: Q6DIC0](#)Mouse

[Unigene: 298990](#)Human

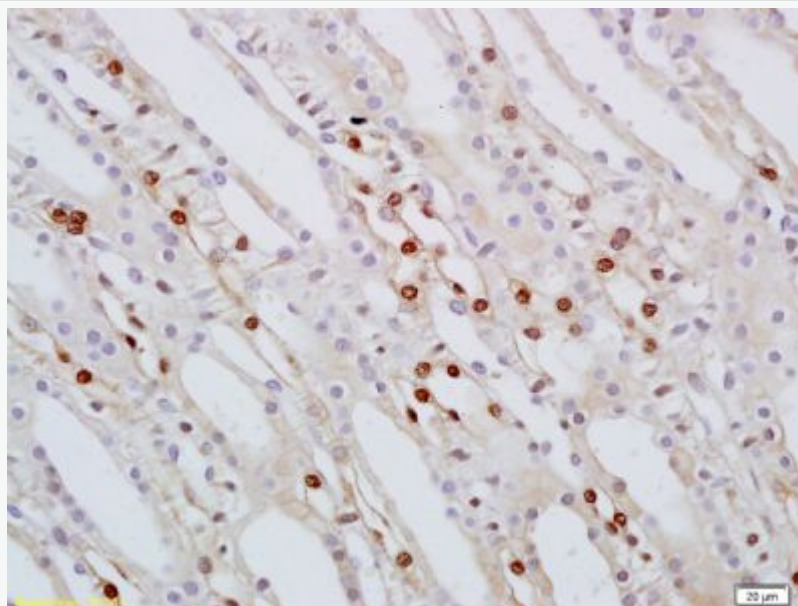
[Unigene: 644901](#)Human

[Unigene: 491146](#)Mouse

Important Note:

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

Picture:



Tissue/cell: rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer
(normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-SMARCA2/BRM Polyclonal Antibody, Unconjugated(SL6402R)
1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-
0023) and DAB(C-0010) staining

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