

**Anti-SNF5 Antibody**  
**Catalog # ABO11237****Specification**

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**Anti-SNF5 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q12824</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1(SMARCB1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-SNF5 Antibody - Additional Information**

**Gene ID** 6598

**Other Names**

SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1, BRG1-associated factor 47, BAF47, Integrase interactor 1 protein, SNF5 homolog, hSNF5, SMARCB1, BAF47, INI1, SNF5L1

**Calculated MW**

44141 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Nucleus.

**Protein Name**

SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human SNF5(362-377aa EKKIRDQDRNTRRMRR), identical to the related rat and mouse sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the SNF5 family.

**Anti-SNF5 Antibody - Protein Information**

**Name** SMARCB1

**Synonyms** BAF47, INI1, SNF5L1

**Function**

Core component of the BAF (hSWI/SNF) complex. This ATP- dependent chromatin-remodeling complex plays important roles in cell proliferation and differentiation, in cellular antiviral activities and inhibition of tumor formation. The BAF complex is able to create a stable, altered form of chromatin that constrains fewer negative supercoils than normal. This change in supercoiling would be due to the conversion of up to one-half of the nucleosomes on polynucleosomal arrays into asymmetric structures, termed altosomes, each composed of 2 histones octamers. Stimulates in vitro the remodeling activity of SMARCA4/BRG1/BAF190A. Involved in activation of CSF1 promoter. 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). Plays a key role in cell-cycle control and causes cell cycle arrest in G0/G1.

**Cellular Location**

Nucleus.

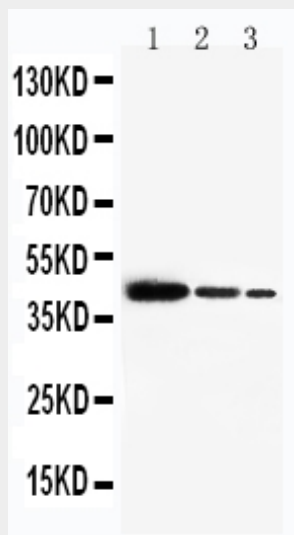
**Anti-SNF5 Antibody - Protocols**

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

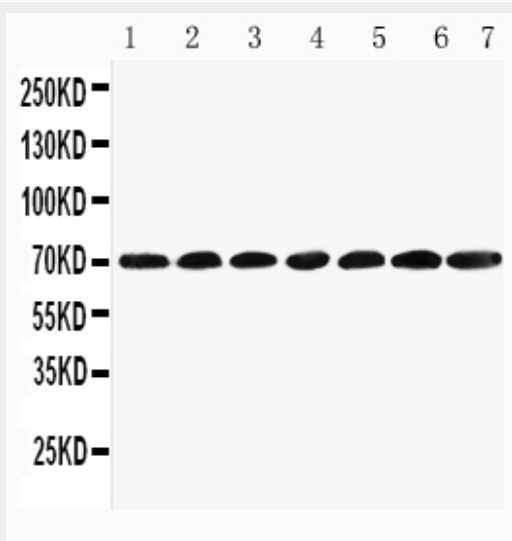
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

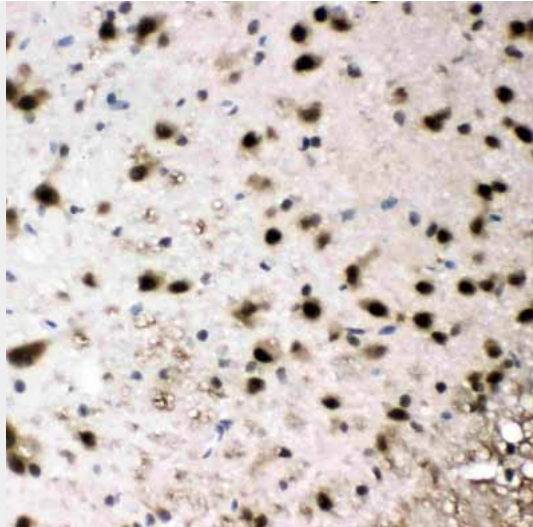
### Anti-SNF5 Antibody - Images



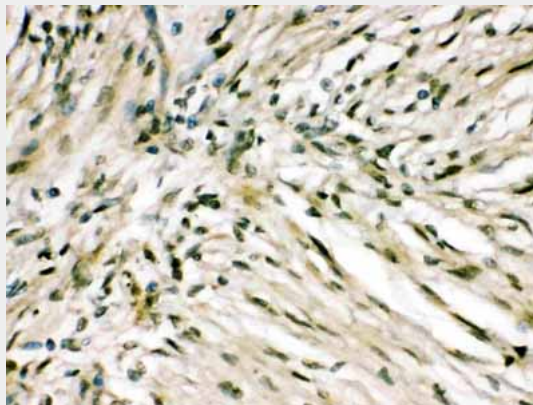
Anti-SNF5 antibody, ABO11237, Western blotting  
Recombinant Protein Detection Source: E.coli derived -recombinant human SMARCB1, 41.0KD(162aa tag+ L186-W385)  
Lane 1: Recombinant Human SMARCB1 Protein 10ng  
Lane 2: Recombinant Human SMARCB1 Protein 5ng  
Lane 3: Recombinant Human SMARCB1 Protein 2.5ng



Anti-SNF5 antibody, ABO11237, Western blotting  
Lane 1: Rat Kidney Tissue Lysate  
Lane 2: Human Placenta Tissue Lysate  
Lane 3: Rat Spleen Tissue Lysate  
Lane 4: PC-12 Cell Lysate  
Lane 5: HELA Cell Lysate  
Lane 6: JURKAT Cell Lysate  
Lane 7: 293T Cell Lysate



Anti-SNF5 antibody, ABO11237, IHC(P)IHC(P): Rat Brain Tissue



Anti-SNF5 antibody, ABO11237, IHC(P)IHC(P): Human Meningeoma Tissue

#### **Anti-SNF5 Antibody - Background**

SMARCB1(SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1), also known as SNF5, INI1 or MALIGNANT RHABDOID TUMOR SUPPRESSOR, is a protein that in humans is encoded by the SMARCB1 gene. The SMARCB1 gene encodes a subunit of the SWI/SNF ATP-dependent chromatin-remodeling complex. The SMARCB1 gene maps to chromosome 22q11.2(Versteeg et al., 1998). Wu et al.(2002) noted that GADD34(PPP1R15A) and SNF5 can coexist in a trimeric complex with chimeric leukemic HRX(MLL) fusion proteins, leading to inhibition of GADD34-mediated apoptosis. By mutation analysis, they showed that the GADD34 region homologous to the HSV-1 ICP34.5 protein was necessary for interaction with SNF5. SNF5 could bind independently with the protein phosphatase-1(PP1) catalytic subunit(PPP1CA) and stimulate its activity in solution and in complex with GADD34. SNF5 and PP1 did not compete for GADD34 binding, but rather formed a stable trimeric complex with GADD34. Wu et al.(2002) proposed that GADD34 mediates growth suppression, at least in part, through its interaction with SNF5. They suggested that SNF5 may function as a regulatory subunit of PP1, either independently or together with GADD34.