



# Anti-SMARCB1 (aa 132-367) polyclonal antibody (DPABH-13873)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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 <i>in vitro</i> 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 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). Plays a key role in cell-cycle control and causes cell cycle arrest in G0/G1. 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.
<b>Immunogen</b>	Recombinant fragment corresponding to internal sequence amino acids 132-367 of Human SNF5 (BC117114).
<b>Isotype</b>	IgG

<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Immunogen affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC-P
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	pH: 7.20; Constituents: 98% PBS, 1% BSA
<b>Preservative</b>	0.02% Sodium Azide
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">SMARCB1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 2 [ Homo sapiens ]</a>
<b>Official Symbol</b>	SMARCB1
<b>Synonyms</b>	SMARCB1; SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1; RDT; INI1; SNF5; Snr1; BAF47; MRD15; RTPS1; Sfh1p; hSNFS; SNF5L1; SWNTS1; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1; hSNF5; SNF5 homolog; BRG1-associated factor 47; integrase interactor 1 protein; malignant rhabdoid tumor suppressor; SWI/SNF-related matrix-associated protein; sucrose nonfermenting, yeast, homolog-like 1;
<b>Entrez Gene ID</b>	<a href="#">6598</a>
<b>Protein Refseq</b>	<a href="#">NP_001007469.1</a>
<b>UniProt ID</b>	<a href="#">Q12824</a>
<b>Pathway</b>	Regulation of retinoblastoma protein;
<b>Function</b>	contributes_to RNA polymerase II core promoter proximal region sequence-specific DNA binding; contributes_to RNA polymerase II distal enhancer sequence-specific DNA binding; Tat protein binding; contributes_to nucleosomal DNA binding