



Anti-SMARCB1 monoclonal antibody, clone 4F21 (DCABH-1482)

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

PRODUCT INFORMATION

Product Overview	Mouse monoclonal to SNF5
Antigen Description	<p>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 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.</p>
Immunogen	Recombinant fragment, corresponding to amino acids 81-181 of Human SNF5 with a proprietary tag (NP_003064).

Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	4F21
Conjugate	Unconjugated
Applications	WB, IHC-P, Sandwich ELISA
Positive Control	PC12 cell lysate; Hela nuclear extract; Human colon tissue; Recombinant tagged SNF5
Format	Liquid
Size	50 µg
Buffer	pH: 7.20; Constituent: 99% PBS
Preservative	None
Storage	store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Ship	Shipped at 4°C.

GENE INFORMATION

Gene Name	SMARCB1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1 [Homo sapiens]
Official Symbol	SMARCB1
Synonyms	SMARCB1; SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1; SNF5L1; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1; BAF47; hSNFS; Ini1; integrase interactor 1;
Entrez Gene ID	6598
Protein Refseq	NP_001007469
UniProt ID	Q12824
Chromosome Location	22q11.23
Pathway	Regulation of retinoblastoma protein, organism-specific biosystem; TNF-alpha/NF-kB Signaling Pathway, organism-specific biosystem;

Function

Tat protein binding; p53 binding; protein binding; transcription coactivator activity; transcription coactivator activity;
