

Recombinant Human SMARCB1 Protein (2-376 aa), His-SUMO-tagged

Cat. No. SMARCB1-1013H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human SMARCB1 Protein (2-376 aa) is produced by E. coli expression system. This protein is fused with a 6xHis-SUMO tag at the N-terminal. Research Area: Cell Cycle. Protein Description: Partial.
Species	Human
Source	E.coli
ProteinLength	2-376 aa
Description	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 st/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 st/progenitor

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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 st cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth . Plays a key role in cell-cycle control and causes cell cycle arrest in G0/G1.

Form	Tris-based buffer, 50% glycerol
Molecular Mass	59.0 kDa
AA Sequence	MMMALSKTFGQKPVKFQLEDDGEFYMGSEVGNLYLRMFRGSLYKRYPSLWRRLAT VEERKKIVASSHGKKTTPNTKDHGYTTLATSVTLLKASEVEEILDGNDEKYKAVSIST EPPTYLREQKAKRNSQWVPTLPNSSHHLDVPCSTTINRNRMGDKKRTFPLCFDD HDPAVIHENASQPEVLVPIRLDMEIDGQKLRFDAFTWNMNEKLMTPEMFSEILCDDLD LNPLTFVPAIASAIRQQIESYPTDSILEDQSDQRVIIKLNHVGNISLVDQFEWDMSEKE NSPEKFALKLCSELGLGGEFVTTIAYSIRGQLSWHQKTYAFSENPLPTVEIAIRNTGD ADQWCPLLETLTDAEMEKKIRDQDRNTRMR
Purity	> 90% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 centigrade/-80 centigrade. The shelf life of lyophilized form is 12

months at -20 centigrade/-80 centigrade.

Concentration A hardcopy of COA with concentration instruction is sent along with the products.

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; SNF5L1; BAF47; hSNFS; Ini1; RDT; Sfh1p; Snr1; yeast; homolog like 1; hSNF5; SNF5 homolog; INI1; SNF5; RTPS1;

Gene ID 6598

mRNA Refseq NM_001007468

Protein Refseq NP_001007469

MIM 601607

UniProt ID Q12824

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