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

**Cat. No.** SMARCB1-1660H **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Recombinant Human SMARCB1 Protein (2-376 aa) is produced by Yeast expression system. This protein is fused with a 6xHis tag at the N-terminal. Research Area: Cell Cycle. Protein Description: Partial. |
| **Species** | Human |
| **Source** | Yeast |
| **ProteinLength** | 2-376 aa |
| **Description** | Core component of the BAF (hSWI/SNF) complex. This ATP-dependent chromatin-rodeling 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 rodeling activity of SMARCA4/BRG1/BAF190A. Involved in activation of CSF1 promoter. Belongs to the neural progenitors-specific chromatin rodeling complex (npBAF complex) and the neuron-specific chromatin rodeling complex (nBAF complex). During neural development a switch from a st/progenitor to a post-mitotic chromatin rodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural st/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

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| | 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** | 45.0 kDa |
| **AA Sequence** | MMMALSKTFGQKPVKFQLEDDGEFYMIGSEVGNYLRMFRGSLYKRYPSLWRRLAT VEERKKIVASSHGKKTKPNTKDHGYTTLATSVTLLKASEVEEILDGNDEKYKAVSIST EPPTYLREQKAKRNSQWVPTLPNSSHHLDAVPCSTTINRNRMGRDKKRTFPLCFDD HDPAVIHENASQPEVLVPIRLDMEIDGQKLRDAFTWNMNEKLMTPEMFSEILCDDLD LNPLTFVPAIASAIRQQIESYPTDSILEDQSDQRVIIKLNIHVGNISLVDQFEWDMSEKE NSPEKFALKLCSELGLGGEFVTTIAYSIRGQLSWHQKTYAFSENPLPTVEIAIRNTGD ADQWCPLLETLTDAEMEKKIRDQDRNTRRMR |
| **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. |

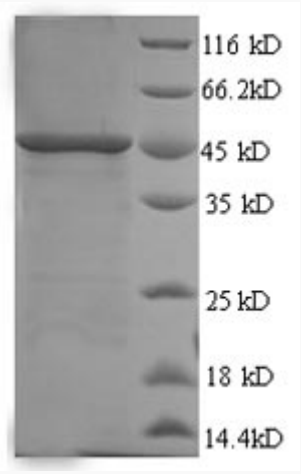
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| **Concentration** | A hardcopy of COA with reconstitution instruction is sent along with the products. |

## GENE INFORMATION

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| **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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(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

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