Recombinant Mouse Smarcb1 Protein, Myc/DDK-tagged

Cat. No. Smarcb1-5960M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of mouse full-length SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1 (Smarcb1), with C-terminal MYC/DDK tag, expressed in HEK293T cells.
Species	Mouse
Source	HEK293
Description	Core component of the BAF (SWI/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. Plays a key role in cell-cycle control and causes cell cycle arrest in G0/G1. 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

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	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.
Molecular Mass	44.6 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade after receiving vials.
Concentration	>50 μg/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	Smarcb1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1 [Mus musculus (house mouse)]
Official Symbol	Smarcb1
Synonyms	SMARCB1; SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1; mSNF5; SNF5 homolog; BRG1-associated factor 47; integrase interactor 1 protein; Ini1; Snf5; Baf47; AU020204; SNF5/INI1; MGC132387

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Gene ID	20587
mRNA Refseq	NM_011418
Protein Refseq	NP_035548
UniProt ID	Q9Z0H3

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