

Active Recombinant Human SMARCA4

Cat. No. SMARCA4-1019H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species Human

Source Sf9 Cells

Description

The wild type human brahma-related gene 1 (Brg1) encodes a protein of 1,647 amino acids that contains a conserved domain of the SWI2/SNF2 family necessary for normal mitotic growth and transcription regulation. BRG1 is an essential component of the SWI/SNF chromatin remodeling complexes and implicated in multiple functions through its interaction with different proteins, including the tumor suppressor protein pRb, serine-threonine kinase LKB1, and other transcription factors. Although Brg1 involves in chromatin remodeling as complexes with other SWI/SNF proteins, purified BRG1 itself is capable of remodeling mononucleosomes and nucleosomal arrays in vitro. Mutations of Brg1 have been found in multiple tumor cell lines. The wild type human BRG1 was expressed in baculovirus system and purified by an affinity column in combination with FPLC chromatography. Purified protein is greater than 95% homogeneous and contains no detectable proteases, DNase, and RNase activity.

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT, 20% glycerol.

Purity

> 95% by SDS-PAGE.

Activity

50-100 ng are required for in vitro nucleosome remodeling assay and 100 ng are

 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

required for a protein-protein interaction assay.

Application

Recombinant BRG1 can be used 1) for protein-protein interaction assay 2) for in vitro transcription assay 3) for in vitro nucleosome remodeling assay and 4) for cell growth assay.

Usage

For in vitro use only.

Storage

Quality guaranteed for 12 months store at - 80°C. Avoid freeze / thaw cycles.

GENE INFORMATION

Gene Name

SMARCA4 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 [Homo sapiens]

Synonyms

SMARCA4; SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4; BRG1; SNF2; SWI2; BAF190; SNF2L4; SNF2LB; hSNF2b; FLJ39786; SNF2-BETA; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin a4; SNF2-like 4; nuclear protein GRB1; brahma protein-like 1; BRM/SWI2-related gene 1; homeotic gene regulator; sucrose nonfermenting-like 4; ATP-dependent helicase SMARCA4; mitotic growth and transcription activator; global transcription activator homologous sequence; SNF2B; Probable global transcription activator SNF2L4; EC 3.6.1.-; BRG-1 protein; nuclear protein GRB1

Gene ID

6597

mRNA Refseq

NM_001128844

Protein Refseq

NP_001122316

 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

MIM	603254
UniProt ID	P51532
Chromosome Location	19p13.3
Function	ATP binding; DNA binding; DNA-dependent ATPase activity; helicase activity; histone acetyl-lysine binding; hydrolase activity; hydrolase activity, acting on acid anhydrides, in phosphorus-containing anhydrides; identical protein binding; nucleotide binding; p53 binding; protein N-terminus binding; transcription activator activity
PDB rendering based on 2grc.	