Recombinant Human SMARCA4, His-tagged

Cat. No. SMARCA4-27675TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length human BRG1, containing a substitution of lysine to arginine at position 798, expressed in a baculovirus system with His tag.
Species	Human
Source	Insect Cells
Description	The protein encoded by this gene is a member of the SWI/SNF family of proteins and is similar to the brahma protein of Drosophila. Members of this family have helicase and ATPase activities and are thought to regulate transcription of certain genes by altering the chromatin structure around those genes. The encoded protein is part of the large ATP-dependent chromatin remodeling complex SNF/SWI, which is required for transcriptional activation of genes normally repressed by chromatin. In addition, this protein can bind BRCA1, as well as regulate the expression of the tumorigenic protein CD44. Mutations in this gene cause rhabdoid tumor predisposition syndrome type 2. Multiple transcript variants encoding different isoforms have been found for this gene.
Form	The protein is in 20mM Tris-HCl pH7.9,100mM NaCl, 0.2mM EDTA, 1mM DTT and 20% glycerol
Molecular Mass	189.0 kDa
Purity	The His-tag recombinant protein is purified by affinity chromatography in combination with FPLC columns. The purified Brg1-mt(K798) is greater than 90% homogeneous

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	based on SDS-PAGE analysis.
Unit Definition	1 unit equals 1 nanogram purified protein. 50 - 100 units are required for an in vitro nucleosome remodeling assay and 100 units are required for a protein-protein interaction assay.
Applications	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.
Storage	Stored at -70°C before use. Avoid repeated freeze thaw cycles.
Full Length	Full L.

GENE INFORMATION

Gene Name	SMARCA4 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 [Homo sapiens (human)]
Official Symbol	SMARCA4
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

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Gene ID	6597
mRNA Refseq	NM_003072
Protein Refseq	NP_003063
MIM	603254
UniProt ID	P51532
Chromosome Location	19p13.2
Pathway	Chromatin modifying enzymes; Direct p53 effectors; Glucocorticoid receptor regulatory network; Integrated Breast Cancer Pathway
Function	ATP binding; DNA polymerase binding; DNA-dependent ATPase activity; contributes_to RNA polymerase II core promoter proximal region sequence-specific DNA binding

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