

Transcription activator BRG1 Recombinant Protein | SMARCA4 recombinant protein

Recombinant Human Transcription activator BRG1

CATALOG # AAA113616	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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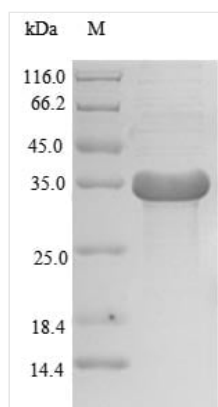
PRODUCT SYNONYMS

Transcription activator BRG1; Recombinant Human Transcription activator BRG1; SMARCA4 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Specificity	Colocalizes with ZEB1 in E-cadherin-negative cells from established lines, and stroma of normal colon as well as in de-differentiated epithelial cells at the invasion front of colorectal carcinomas (at protein level).
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	808-1092aa; Partial
Sequence	IIVPLSTLSN WAYEFDKWAP SVVKVSYKGS PAARRAFVPQ LRSGKFNVLL TTYEYIIKDK HILAKIRWKY MIVDEGHRMK NHHCKLTQVL NTHYVAPRRL LLTGTPQLNK LPELWALLNF LLPTIFKSCS TFEQWFNAPF AMTGEKVDLN EEETILIIRR LHKVLRPFL RRLKKEVEAQ LPEKVEYVIK CDMSALQRL YRHMQAQGV LTDGSEKDKK GKGGTKLMN TIMQLRKICN HPYMFQHIEE SFSEHLGFTG GIVQGLDLYR ASGKFELDR ILPKL
Subcellular Location	Nucleus
Protein Families	SNF2/RAD54 helicase family
Preparation and 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 degree C/-80 degree C. The shelf life of lyophilized form is 12 months at -20 degree C/-80 degree C. Repeated freezing and thawing is not recommended. Store working aliquots at 4 degree C for up to one week.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for SMARCA4 recombinant protein	Transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. Component of the CREST-BRG1 complex, a multiprotein complex that regulates promoter activation by orchestrating a calcium-dependent release of a repressor complex and a recruitment of an activator complex. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex. At the same time, there is increased recruitment of CREBBP to the promoter by a CREST-dependent mechanism, which leads to transcriptional activation. The CREST-BRG1 complex also binds to the NR2B promoter, and activity-dependent induction of NR2B expression involves a release of HDAC1 and recruitment of CREBBP. 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 post-mitotic 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 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 stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth. SMARCA4/BAF190A may promote neural stem cell self-renewal/proliferation by enhancing Notch-dependent proliferative signals, while concurrently making the neural stem cell insensitive to SHH-dependent differentiating cues (By similarity). Acts as a corepressor of ZEB1 to regulate E-cadherin transcription and is required for induction of epithelial-mesenchymal transition (EMT) by ZEB1.
Product Categories/Family for SMARCA4 recombinant protein	Cancer

NCBI AND UNIPROT INFORMATION

NCBI GI #	192807312
NCBI GeneID	6597
NCBI Accession #	NP_001122316.1
NCBI GenBank Nucleotide #	NM_001128844.1
UniProt Accession #	P51532; O95052; Q9HBD3; B1A8Z4; B1A8Z5; B1A8Z6; B1A8Z7; E9PBR8
Molecular Weight	37.1 kDa
NCBI Official Full Name	transcription activator BRG1 isoform B
NCBI Official Synonym Full Names	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4
NCBI Official Symbol	SMARCA4
NCBI Official Synonym Symbols	BRG1; SNF2; SWI2; MRD16; RTPS2; BAF190; SNF2L4; SNF2LB; hSNF2b; BAF190A
NCBI Protein Information	transcription activator BRG1
UniProt Protein Name	Transcription activator BRG1
UniProt Gene Name	SMARCA4
UniProt Synonym Gene Names	BAF190A; BRG1; SNF2B; SNF2L4; BAF190A
UniProt Entry Name	SMCA4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.