

Product datasheet for TG309249

OriGene Technologies, Inc.

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BRG1 (SMARCA4) Human shRNA Plasmid Kit (Locus ID 6597)

Product data:

Product Type: shRNA Plasmids

Product Name: BRG1 (SMARCA4) Human shRNA Plasmid Kit (Locus ID 6597)

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Synonyms: BAF190; BAF190A; BRG1; CSS4; hSNF2b; MRD16; RTPS2; SNF2; SNF2-beta; SNF2L4; SNF2LB;

SWI2

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: SMARCA4 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID =

6597). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 001128844, NM 001128845, NM 001128846, NM 001128847, NM 001128848,

NM 001128849, NM 003072, NM 003072.1, NM 003072.2, NM 003072.3, NM 001128848.1, NM 001128847.1, NM 001128846.1, NM 001128845.1, NM 001128844.1, NM 001128849.1,

BC007302, BC035916, BC136644, BC139917, BC139924, BC150298, BC151849,

NM 001128847.4, NM 001128846.2, NM 001128848.2, NM 001128849.3, NM 001128845.2,

NM 003072.5, NM 001128844.3

UniProt ID: P51532

Summary: 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. [provided by RefSeq, May 2012]





shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).