

Product datasheet for TR510890

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Sgol2a Mouse shRNA Plasmid (Locus ID 68549)

Product data:

Product Type: shRNA Plasmids

Product Name: Sgol2a Mouse shRNA Plasmid (Locus ID 68549)

Locus ID: 68549

Synonyms: 1110007N04Rik; 4932411A20Rik; 5730576N04Rik; AU018846; AV008062; D1Ertd8e; Sgol2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Sgol2a - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

68549). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: BC052742, NM 001177867, NM 199007, NM 199007.1, NM 001177867.1, BC023855,

BC044797, BC065809

UniProt ID: Q7TSY8

Summary: Cooperates with PPP2CA to protect centromeric cohesin from separase-mediated cleavage in

oocytes specifically during meiosis I. Has a crucial role in protecting REC8 at centromeres from cleavage by separase. During meiosis, protects centromeric cohesion complexes until metaphase II/anaphase II transition, preventing premature release of meiosis-specific REC8

cohesin complexes from anaphase I centromeres. Is thus essential for an accurate gametogenesis. May act by targeting PPP2CA to centromeres, thus leading to cohesin dephosphorylation. Essential for recruiting KIF2C to the inner centromere and for correcting

defective kinetochore attachments. Involved in centromeric enrichment of AUKRB in

prometaphase.[UniProtKB/Swiss-Prot Function]

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 <u>techsupport@origene.com</u>. 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).