

## **Product datasheet for TL502099**

## OriGene Technologies, Inc.

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## Son Mouse shRNA Plasmid (Locus ID 20658)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Son Mouse shRNA Plasmid (Locus ID 20658)

**Locus ID:** 20658

**Synonyms:** 2900011L12Rik; AA409051; AU067731; C81487; mKIAA1019; nrebp

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Son - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 20658). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 019973, NM 178880, NM 019973.1, NM 019973.2, NM 178880.3, NM 178880.4,

BC003245, BC029990, BC046419, BC051200, BC055728, BC061113, BC145121

UniProt ID: Q9QX47

Summary: RNA-binding protein that acts as a mRNA splicing cofactor by promoting efficient splicing of

transcripts that possess weak splice sites. Specifically promotes splicing of many cell-cycle and DNA-repair transcripts that possess weak splice sites, such as TUBG1, KATNB1, TUBGCP2,

AURKB, PCNT, AKT1, RAD23A, and FANCG. Probably acts by facilitating the interaction between Serine/arginine-rich proteins such as SRSF2 and the RNA polymerase II. Also binds to DNA; binds to the consensus DNA sequence: 5'-GA[GT]AN[CG][AG]CC-3' (By similarity). Essential for correct RNA splicing of multiple genes critical for brain development, neuronal migration and metabolism, including TUBG1, FLNA, PNKP, WDR62, PSMD3, PCK2, PFKL, IDH2, and ACY1 (By similarity). May also regulate the ghrelin signaling in hypothalamic neuron by acting as a negative regulator of GHSR expression (PubMed:20876580).[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 <u>custom shRNA service</u>.





## 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).