

Product datasheet for TL504162

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Nsmce2 Mouse shRNA Plasmid (Locus ID 68501)

Product data:

Product Type: shRNA Plasmids

Product Name: Nsmce2 Mouse shRNA Plasmid (Locus ID 68501)

Locus ID: 68501

Synonyms: 1110014D18Rik; Al661537 Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Nsmce2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 68501).

5µg purified plasmid DNA per construct

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

RefSeq: BC009125, NM 001164604, NM 026746, NM 001164604.1, NM 026746.1, NM 026746.2,

NM 026746.3

UniProt ID: Q91VT1

Summary: E3 SUMO-protein ligase component of the SMC5-SMC6 complex, a complex involved in repair

of DNA double-strand breaks by homologous recombination. Is not be required for the

stability of the complex. The complex may promote sister chromatid homologous

recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. The complex is required for telomere maintenance via recombination and mediates sumoylation

of shelterin complex (telosome) components. Acts as an E3 ligase mediating SUMO

attachment to various proteins such as SMC6L1 and TRAX, the shelterin complex subunits TERF1, TERF2, TINF2 and TERF2IP, and maybe the cohesin components RAD21 and STAG2. Required for recruitment of telomeres to PML nuclear bodies. SUMO protein-ligase activity is required for the prevention of DNA damage-induced apoptosis by facilitating DNA repair. Required for sister chromatid cohesion during prometaphase and mitotic progression (By

similarity).[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).