

Product datasheet for RR207782L4

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OriGene Technologies, Inc.

Nsmce2 (NM_001024876) Rat Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Nsmce2 (NM_001024876) Rat Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Nsmce2

Synonyms: RGD1305156

Mammalian Cell Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Puromycin

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RR207782).

Sequence:

Sgfl-Mlul

Restriction Sites: Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_001024876

ORF Size: 741 bp



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OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001024876.1</u>, <u>NP 001020047.1</u>

RefSeq Size: 1072 bp
RefSeq ORF: 744 bp
Locus ID: 299957
UniProt ID: Q4V8A0
Cytogenetics: 7q33

Gene 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

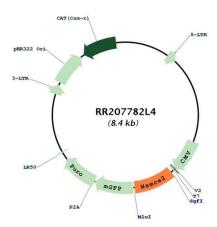
of shelterin complex (telosome) components. Acts as an E3 ligase mediating SUMO

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]



Product images:



Circular map for RR207782L4