

Product datasheet for MR216674

Nsmce2 (NM_001164604) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Nsmce2 (NM_001164604) Mouse Tagged ORF Clone

Tag: Myc-DDK Symbol: Nsmce2

Synonyms: 1110014D18Rik; Al661537

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >MR216674 representing NM_001164604
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR216674 representing NM_001164604

Red=Cloning site Green=Tags(s)

MPGRSSTSSGSTRYISFSGIESALSSLKNFQSCISSGMDTVSSVALDLVETQTEVSSEYSMDKAMVEFAK MDRELSHYVKAVQSTINHVKEERPEKVPDLKLLVEKKFLALQDKNSDADFKENEKFVQFKQQLRELKKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites: Sgfl-Mlul



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

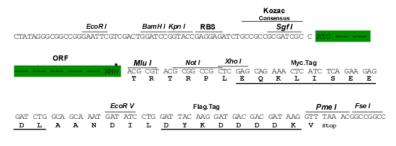
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



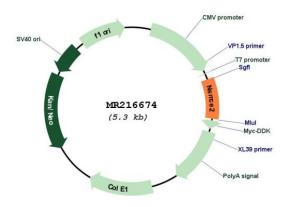
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001164604

ORF Size: 417 bp

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



Nsmce2 (NM_001164604) Mouse Tagged ORF Clone - MR216674

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 001164604.1</u>, <u>NP 001158076.1</u>

 RefSeq Size:
 2745 bp

 RefSeq ORF:
 420 bp

 Locus ID:
 68501

 UniProt ID:
 Q91VT1

 Cytogenetics:
 15 D1

 MW:
 16.2 kDa

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]