

Product datasheet for **MC210732**

Nsmce2 (NM_001164604) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nsmce2 (NM_001164604) Mouse Untagged Clone
Tag: Tag Free
Symbol: Nsmce2
Synonyms: 1110014D18Rik; AI661537
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC210732 representing NM_001164604
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCCAGGACGGTCCAGTACAAGTTCAGGTTCTACCCGTTACATATCCTTCAGTGGCATAGAGTCAGCTC
TCTCCTCCTTAAAAACTTCCAATCCTGTATCAGCTCTGGAATGGACACAGTTTCTAGTGTTCCTTGG
CCTTGTGGAGACTCAACTGAAGTGAGTAGTGAGTACAGTATGGACAAGGCCATGGTTGAGTTTGCTAAA
ATGGATCGAGAACTAAGCCATTATGTTAAGGCTGTGCAGTCTACAATCAATCATGTAAAAGAAGAACGTC
CAGAAAAAGTACCAGATTTAAAATTACTGGTAGAGAAGAAATTTTGGCTTTACAGGATAAAGAACTCTGA
TGCCGACTTTAAAGAGAATGAAAAGTTCGTGCAGTTCAAGCAACAGCTGAGGGAGCTGAAGAAGCAATGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI

ACCN: NM_001164604

Insert Size: 420 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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: [NM_001164604.1](#), [NP_001158076.1](#)

RefSeq Size: 2745 bp

RefSeq ORF: 420 bp

Locus ID: 68501

UniProt ID: [Q91VT1](#)

Cytogenetics: 15 D1

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]

Transcript Variant: This variant (2) includes an alternate exon, which results in a frameshift, compared to variant 1. The resulting protein (isoform 2) has a distinct C-terminus, compared to isoform 1.