

Product datasheet for **RN207782**

Nsmce2 (NM_001024876) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nsmce2 (NM_001024876) Rat Untagged Clone
Tag: Tag Free
Symbol: Nsmce2
Synonyms: RGD1305156
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN207782 representing NM_001024876
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCAGGACGGTCCAGTACAAATTCAGGTTCTACTCGTTACATATCCTTCAGTGGTGTAGAGTCAGCTC
 TCTCCTCCTTAAAAACCTTCCAGTCCTGTATCAGCTCTGGGATGGACACAGTTTCTAGTGTGCCTTGA
 CCTTGTGGAGACCCAACTGAAGTGAGTGTGAGTACAGTATGGACAAGCCATGGTTGAATTTGCTAAA
 ATGGATCGAGAACTAAACCATTATGTTAAGGCTGTCCAGTCTACAATAAATCATGTAAAAGAAGAAGCTC
 CAGAAAAAGTACCAGATTTAAAATTAAGTGGGAGAAATTTTGGCTTTACAGGATAAAGAACTCTGA
 CGCCGACTTTAAAGAGAAATGAAAAGTTCGTGCAGTTTAAAGCAGCAGCTGCGGGAGCTGAAGAAGCAATAT
 GGTATTCATGCAGACAGAGAGAAATGATGGGATAGAAGGAATGGATGAAGATATGATTGTGACCCAGAGCC
 AAACCAATTTTCATCTGCCCCATAACACAGTTGGAAATGAAGAAGCCAGTGAAAAATAAATGTGTGGCCA
 CACATACGAAGAGGAAGCCATTGTTCCGATGATTGAATCCAAGCATAAGAGGAAGAAGAAGGCTTGTTC
 CCAAAAATTTGGCTGTAGCCACACAGACATGAGAATGTGAGATCTCATTCCGGATGAAGCCCTGAGAAGGG
 CAATCGAGAGCCACAACAAGAAGAAAAGCGCCACTCCGAG**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
ACCN: NM_001024876
Insert Size: 744 bp



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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:	<ol style="list-style-type: none">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_001024876.1 , NP_001020047.1
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]