

## Product datasheet for MR222297

### Nanos2 (NM\_194064) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Nanos2 (NM\_194064) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Nanos2  
**Synonyms:** nos2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR222297 representing NM\_194064  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACCTACCGCCCTTTGACATGTGGAGAGACTACTTTAACCTGAGCCAGGTGGTATGGATATAATTC  
AGAGCCGGAAGCAAAGACAGGAGGGTGAGGTAGCTGAGGAGCCAACTCCAGGCCCCAGGAGAAGAGTGA  
GCAGGACCTGGAGGGCTACCCTGGATGTCTGCCTACCATATGCAACTTCTGCAAGCACAATGGGGAGTCT  
CGTCACGTCTACACCTCACACCAGCTGAAGACGCCTGAAGGGTGGTTGTGTGCCATCCTGAGGCACT  
ATGTGTGCTCTATGTGGAGCCACCGGCGACCAGGCTCATACTCAAGTATTGTCCACTCAACAGCAG  
TCAGCAGTCTCTACCGACGCAGTGGGCGAAACTCAGCTGGTCGCAGAGTCAAGCGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR222297 representing NM\_194064  
Red=Cloning site Green=Tags(s)

MDLPPFDMWRDYFNLQVVMDDIIQSRKQRQEGEVAEENSRPQEKSEQDLEGYPGCLPTICNFCKHNGES  
RHVYTSHLKLTPEGVVVCPILRHVYVCLCGATGDQAHTLKYCPLNSSQQSLYRRSGRNSAGRVRVKR

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1396\\_f06.zip](https://cdn.origene.com/chromatograms/ja1396_f06.zip)

**Restriction Sites:** SgfI-MluI



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Cloning Scheme:



ACCN: NM\_194064

ORF Size: 408 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](#)

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: [NM\\_194064.2](#), [NP\\_918953.2](#)

RefSeq Size: 1439 bp

RefSeq ORF: 411 bp

Locus ID: 378430

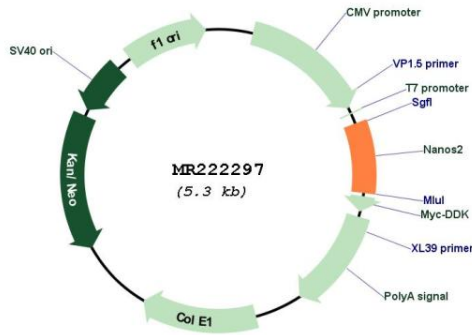
UniProt ID: [P60322](#)

**Cytogenetics:** 7 A3

**MW:** 16 kDa

**Gene Summary:** Plays a key role in the sexual differentiation of germ cells by promoting the male fate but suppressing the female fate. Represses the female fate pathways by suppressing meiosis, which in turn results in the promotion of the male fate. Maintains the suppression of meiosis by preventing STRA8 expression, which is required for premeiotic DNA replication, after CYP26B1 is decreased. Regulates the localization of the CCR4-NOT deadenylation complex to P-bodies and plays a role in recruiting the complex to trigger the degradation of mRNAs involved in meiosis. Required for the maintenance of the spermatogonial stem cell population. Not essential for the assembly of P-bodies but is required for the maintenance of their normal state.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR222297