

Product datasheet for RC221867

NANOS3 (NM_001098622) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NANOS3 (NM_001098622) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NANOS3
Synonyms: NANOS1L; NOS3; ZC2HC12C
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC221867 representing NM_001098622
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAACTACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGGGACCTTTGACCTGTGGACAGATTACCTGGGTTTGGCACACCTGGTTAGGGCTCTGAGTGGGAAAG
 AGGGTCTGAAACCAGGCTGAGCCCCAGCCAGAGCCAGAGCCAAATGCTGGAGCCGGTGTGAGCCCTGGA
 GCCGATGCCAGCGCCGGAGTCGGTGCCAGTGCCGGGACCAAGGATCAGAAGCGCAGCCTGGAGTCTCG
 CCAGCTCCCGAACGCCTGTGCTCTTTCTGCAACACAACGGCGAGTCCCGGGCCATCTACAGTCCCACG
 TGCTGAAGGACGAGGCTGGCAGGGTGTGTGTCCCATCCTGCGGGACTACGTGTGTCCCACTGCGGCGC
 CACACGTGAGCGCGCCACACCCGACGCTTCTGCCCACTTACTGGCCAGGGCTACACCTCCGTCTACAGC
 CACACCACCCGAACTCGGCAGGCAAGAAGCTGGTCCGGCCTGACAAGGCGAAGACACAGGACACAGGCC
 ACCGCGGAGGAGGAGGAGGAGCAGGTTTCAGAGGTGCCGGAAGTCTGAGCCTTCGCCCTCTGCTC
 TCCCTCCATGTCCACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221867 representing NM_001098622
 Red=Cloning site Green=Tags(s)

MGTFDLWTDYLGLAHLVRALSGKEGPETRLSPQPEPEPMLPVSALPMPAPESVPVPGPKDQKRSLESS
 PAPERLCSFCKHNGESRAIYQSHVLKDEAGRVLCPILRDYVCPQCGATRERAHTRRFCLPTGQGYTSVYS
 HTRNSAGKKLVRPDKAKTQDTGHRGGGGGAGFRGAGKSESPSCSPSMST

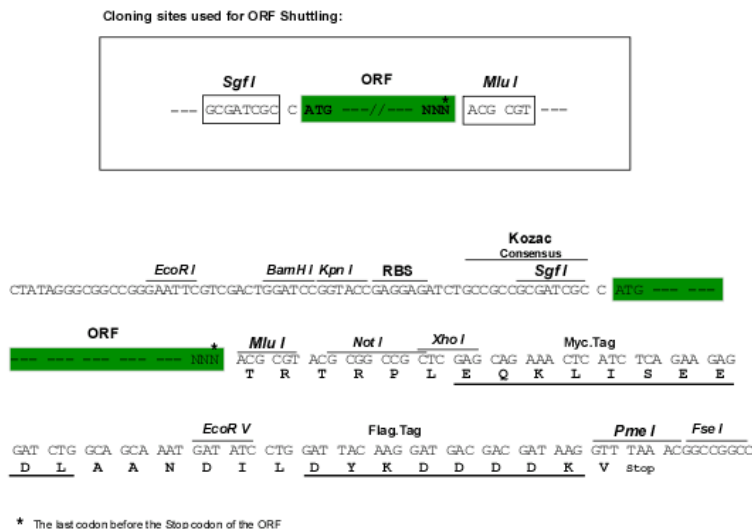
TRTRPLEQKLISEEDLAANDILDYKDDDDKV


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Chromatograms: https://cdn.origene.com/chromatograms/mg2930_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001098622

ORF Size: 576 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_001098622.2](#), [NP_001092092.1](#)

RefSeq Size: 946 bp

RefSeq ORF: 579 bp

Locus ID: 342977

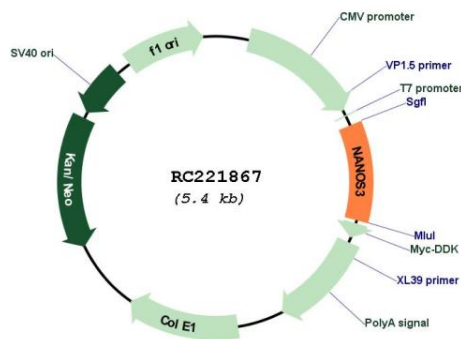
UniProt ID: [P60323](#)

Cytogenetics: 19p13.12

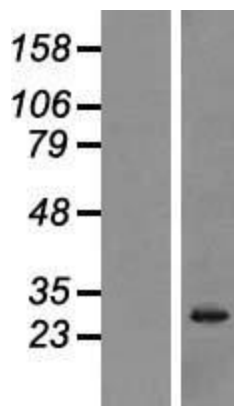
MW: 20.5 kDa

Gene Summary: Plays a role in the maintenance of the undifferentiated state of germ cells regulating the spermatogonia cell cycle and inducing a prolonged transit in G1 phase. Affects cell proliferation probably by repressing translation of specific mRNAs. Maintains the germ cell lineage by suppressing both Bax-dependent and -independent apoptotic pathways. Essential in the early stage embryo to protect the migrating primordial germ cells (PGCs) from apoptosis.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC221867



Western blot validation of overexpression lysate (Cat# [LY420646]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221867 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).