

## Product datasheet for RC237223

### NANOG (NM\_001297698) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NANOG (NM_001297698) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NANOG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC237223 representing NM_001297698 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGTGTGGATCCAGCTTGTCCCAAAGCTTGCCTTGCTTTGAAGCATCCGACTGTAAAGAATCTTCAC  
CTATGCCGTGATTTGTGGGCCTGAAGAAAATCCATCCTTGCAAATGTCTTCTGCTGAGATGCCTCA  
CACGGAGACTGTCTCTCCTTCTCCTTCCATGGATCTGCTTATTCAGGACAGCCCTGATTCTTCCACC  
AGTCCCAAAGGCAAACAACCCACTTCTGCAGAGAAGAGTGTGCAAAAAAGGAAGACAAGGTCCTGGTCA  
AGAAACAGAAGACCAGAAGTGTCTTCCACCCAGCTGTGTACTCAATGATAGATTTCCAGAGACA  
GAAATACCTCAGCTCCAGCAGATGCAAGAAGTCTCAACATCCTGAACCTCAGCTACAAACAGGTGAAG  
ACCTGGTTCCAGAACCAGAGAATGAAATCTAAGAGGTGGCAGAAAAACAAGTGGCCGAAGAATAGCAATG  
GTGTGACGCAGGGATGCCTGGTGAACCCGACTGGGAACCTTCCAATGTGGAGCAACCAGACCTGGAACAA  
TTCAACCTGGAGCAACCAGACCCAGAACATCCAGTCTGGAGCAACCCTCTGGAACACTCAGACCTGG  
TGCACCCAATCCTGGAACAATCAGGCCTGGAACAGTCCCTTCTATAACTGTGGAGAGGAATCTCTGCAGT  
CCTGATGCAGTCCAGCCAAATCTCCTGCCAGTACTGGAGGCTGCCTTGGAAAGCTGCTGGGGAAGG  
CCTTAATGTAATACAGCAGACCACTAGGTATTTAGTACTCCACAACCATGGATTTATTCCTAAACTAC  
TCCATGAACATGCAACCTGAAGACGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC237223 representing NM\_001297698  
 Red=Cloning site Green=Tags(s)

MSVDPACPQSLPCFEASDCKESSPMPVICGPEENYPQLQSSAEMPHETVSPLPSSMDLLIQDSPDSST  
 SPKGKQPTSAEKSVAKKEDKVPVKKQKTRTVFSSSTQLCVLNDRFQRQKYLSQLQMQELSNILNLSYKQVK  
 TWFQNRMKSKRWQKNNWPKNNSNGVTQGCLVNPVTGNLPMWSNQTWNNSTWSNQTQNIQSWNSHSWNTQTW  
 CTQSWNNQAWNSPFYNCGEEESLQSCMQFQPNSPASPDLAALAAEAGEGLNVIQQTTRYFSTPQTMDLFLNY  
 SMNMQPEDV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001297698

**ORF Size:** 867 bp

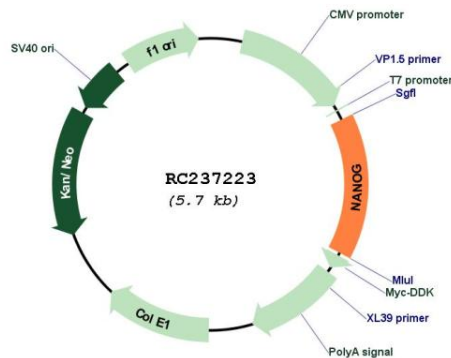
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_001297698.2</a></u>
<b>RefSeq Size:</b>	2055 bp
<b>RefSeq ORF:</b>	870 bp
<b>Locus ID:</b>	79923
<b>UniProt ID:</b>	<u><a href="#">Q9H9S0</a></u>
<b>Cytogenetics:</b>	12p13.31
<b>Protein Families:</b>	Cancer stem cells, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Stem cell - Pluripotency
<b>MW:</b>	33.3 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a DNA binding homeobox transcription factor involved in embryonic stem (ES) cell proliferation, renewal, and pluripotency. The encoded protein can block ES cell differentiation and can also autorepress its own expression in differentiating cells. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]

**Product images:**



Circular map for RC237223