

## Product datasheet for **SC305169**

### NANOG (NM\_024865) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NANOG (NM\_024865) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** NANOG  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL5  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**Fully Sequenced ORF:**

```
>OriGene ORF sequence for NM_024865 edited
CGGCCGCGGAATCTTTCTCCTCTTCTCTATACTAACATGAGTGTGGATCCAGCTTGT
CCCCAAAGCTTGCCTTGGCTTTGAAGCATCCGACTGTAAAGAATCTCACCTATGCCTGTG
ATTTGTGGGCTGAAGAAAATCCATCCTTGCAAATGTCTTCTGCTGAGATGCCTCAC
ACAGAGACTGTCTCCTCTTCTCCTCCATGGATCTGCTTATTCAGGACAGCCCTGAT
TCTTCCACAGTCCCAAAGGCAAACAACCCACTTCTGCAGAGAATAGTGTGCAAAAAAG
GAAGACAAGGTCCCGGTCAAGAAACAGAAGACCAGAACTGTGTTCTTTCCACCCAGCTG
TGTGTAATCAATGATAGATTTTCAGAGACAGAAATACCTCAGCCTCCAGCAGATGCAAGAA
CTCTCCAACATCCTGAACCTCAGCTACAAACAGGTGAAGACCTGGTTCCAGAACCAGAGA
ATGAAATCTAAGAGGTGGCAGAAAAACAACCTGGCCGAAGAATAGCAATGGTGTGACGCAG
AAGGCCTCAGCACCTACCTACCCAGCCTTACTTCTTACCACCAGGGATGCCTGGTG
AACCCGACTGGGAACCTTCCAATGTGGAGCAACCAGACCTGGAACAATCAACCTGGAGC
AACCCAGACCCAGAACATCCAGTCTGGAGCAACCCTCCTGGAACACTCAGACCTGGTGC
ACCCAATCCTGGAACAATCAGGCCTGGAACAGTCCCTTCTATAACTGTGGAGAGGAATCT
CTGCAGTCTGCATGCACCTCCAGCCAAATTCCTGCCAGTGACTTGGAGGCTGCTTTG
GAAGCTGCTGGGAAGGCCTTAATGTAATACAGCAGACCACTAGGTATTTTAGTACTCCA
CAAACCATGGATTTATTCCTAACTACTCCATGAACATGCAACCTGAAGACGTGTGAAGA
TGAGTGAAACTGATATTACTCAATTTTCAGTCTGGACAC
```



[View online »](#)

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_024865 unedited  
 NNNNGGAAGGTTTCAGTATTGTATACGACTCATATAGGCGGCCGCGGAATCTTTTCCTCCTC  
 TTCCTCTATACTAACATGAGTGTGGATCCAGCTTGTCCCAAAGCTTGCCTTGCTTTGAA  
 GCATCCGACTGTAAGAATCTTCACCTATGCCTGTGATTTGTGGGCTGAAGAAAATAT  
 CCATCCTTGCAAATGTCTTCTGTGAGATGCCTCACACAGAGACTGTCTCTCCTTTCCT  
 TCCTCCATGGATCTGCTTATTCAGGACAGCCCTGATTCTTCCACCAGTCCCAAAGGCAAA  
 CAACCCACTTCTGCAGAGAATAGTGTCCGCAAAAAAGGAAGACAAGTCCCGGTCAAGAAA  
 CAGAAGACCAGAACTGTGTTCTCTTCCACCCAGCTGTGTACTCAATGATAGATTTTCAG  
 AGACAGAAATACCTCAGCCTCCAGCAGATGCAAGAACTCTCCAACATCCTGAACCTCAGC  
 TACAAACAGGTGAAGACCTGGTTCAGAACCCAGAGAATGAAATCTAAGAGGTGGCAGAAA  
 AACAACTGGCCGAAGAATAGCAATGGTGTGACGCAGAAGGCCCTCAGCACCTACCTACCCC  
 AGCCTCTACTCTTCTACCACAGGGATGCCTGGTGAACCCGACTGGGAACCTTCCAATG  
 TGGAGCAACCAGACCTGGAACAATTCAACCTGGAGCAACCAGACCAGAACATCCAGTCC  
 TGGAGCAACCACCTCTGGAACACTCAGACCTGGTGCACCAATCCTGGAACAATCANGCC  
 TGGAACAGTCCCTTCTATAACTGTGGAGAGGAATCTCTGCAGTCTGCATGCACTTCCAG  
 CCAAATCTCCTGCCAGTGACTTTGGAAGCTGCCTTTGGAGCTGCTGGGGGAAGGCCTTA  
 TGA

**3' Read Nucleotide Sequence:** >OriGene 3' read for NM\_024865 unedited  
 NGGGAATAGCTTGNACC CGGCCGCATNCTANGATCGAGCAGTCCAGACTGAAATTG  
 AGTAATATCAGTTTCACTCATCTTACACAGTCTTCAGGTTGCATGTTTCATGGAGTAGTTT  
 AGGAATAAATCCATGTTTGTGGAGTACTAAAATACCTAGTGGTCTGCTGATTACATTA  
 AGGCCTTCCCCAGCAGCTTCCAAGGCAGCCTCCAAGTCACTGGCAGGAGAATTTGGCTGG  
 AAGTGCATGCAGGACTGCAGAGATTCTCTCCACAGTTATAGAAGGGACTGTTCCAGGCC  
 TGATTGTTCCAGGATTGGGTGCACCAGGTCTGAGTGTCCAGGAGTGGTTGCTCCAGGAC  
 TGGATGTTCTGGGTCTGGTTGCTCCAGGTTGAATTGTTCCAGGTCTGGTTGCTCCACATT  
 GGAAGGTTCCCAGTGGGTTCCACCAGGCATCCCTGGTGGTAGGAAGAGTAGAGGCTGGGG  
 TAGGTAGGTGCTGAGGCCTTCTGCGTCACACCATTGCTATTCTTCGGCCAGTTGTTTTTC  
 TGCCACCTCTTAGATTTTATTCTCTGGTCTGGAACCAGGTCTTACCTGTTTGTAGCTG  
 AGGTTCCAGGATGTTGGAGAGTCTTGCATCTGCTGGAGGCTGAGGTATTTCTGTCTCTGA  
 AATCTATCATTGAGTACACAGCTGGGTGGAAGAGAACACAGTTCTGGTCTTCTGTTTC  
 TTGACCGGACCTTGTCTTCTTTTTTGGGACACTATTCTCTGCAGAAGTGGGTTGTTTG  
 CCTTTGGGACTGGTGAAGAATCANGGCTGTCTGAATAAGCAGATCCATGNGAGAAAGG  
 AAGAGAGAGACAGTCTCTGTGTGAGGCATCTCAGCAGAAGACATTTGCAAGGATGGATAG

**Restriction Sites:** Please inquire

**ACCN:** NM\_024865

**Insert Size:** 1200 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>There are 5 nucleotide differences between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 1 amino acid. This substitution is validated by the human genome assemblies NT_010194.16 (NIH) and NW_925840.1 (Celera).</p>
<b>Components:</b>	<p>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).</p>
<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_024865.1, NP_079141.1</a></u>
<b>RefSeq Size:</b>	2114 bp
<b>RefSeq ORF:</b>	918 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

**Gene Summary:**

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.