

Product datasheet for **MG226678**

Nanog (NM_028016) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nanog (NM_028016) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nanog
Synonyms:	2410002E02Rik; ecat; ecat4; EN; ENK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226678 representing NM_028016 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGTGGTCTTCCTGGTCCCCACAGTTTGCCTAGTTCTGAGGAAGCATCGAATTCTGGGAACGCCT
CATCAATGCCTGCAGTTTTTCATCCCGAGAACTATTCTTGCTTACAAGGGTCTGCTACTGAGATGCTCTG
CACAGAGGCTGCCTCTCCTCGCCCTTCTCTGAAGACCTGCCTCTCAAGGCAGCCCTGATTCTTCTACC
AGTCCCAAACAAAAGCTCTCAAGTCTGAGGCTGACAAGGGCCCTGAGGAGGAGGAGAACAAGGTCCTTG
CCAGGAAGCAGAAGATGCGGACTGTGTTCTCTCAGGCCAGCTGTGTGCACTCAAGGACAGTTTTAGAA
GCAGAAGTACCTCAGCCTCCAGCAGATGCAAGAACTCTCCTCCATTCTGAACCTGAGCTATAAGCAGTT
AAGACCTGGTTTTCAAACCAAAGGATGAAGTGCAAGCGGTGGCAGAAAAACCAAGTGGTTGAAGACTAGCA
ATGGTCTGATTCAGAAGGGCTCAGCACCAGTGGAGTATCCAGCATCCATTGCAGCTATCCCCAGGGCTA
TCTGGTGAACGCATCTGGAAGCCTTCCATGTGGGGCAGCCAGACTTGGACCAACCCAATTGGAGCAGC
CAGACCTGGACCAACCCAATTGGAACAACCAGACCTGGACCAACCCAATTGGAGCAGCCAGGCCTGGA
CCGCTCAGTCTGGAACGGCCAGCCTTGAATGCTGCTCCGCTCCATAACTTCGGGGAGGACTTTCTGCA
GCCTTACGTACAGTTGCAGCAAACTTCTCTGCCAGTGATTTGGAGGTGAATTTGGAAGCCACTAGGGAA
AGCCATGCGCATTTTAGCACCCACAAGCCTTGAATTATCTGAACTACTCTGTGACTCCACCAGGTG
AAATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >MG226678 representing NM_028016
 Red=Cloning site Green=Tags(s)

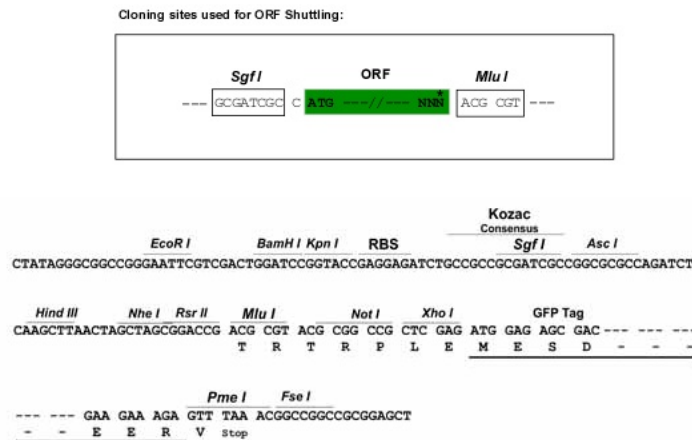
MSVGLPGPHSLPSSEEASNSGNASSMPAVFHPENYSCLQGSATEMLCTEASPRPSSDLPLQGSPDSST
 SPKQKLSPEADKGPEEEENKVLARKQKMRTVFSQAQLCALKDRFQKQKYL SLQQMQELSSILNL SYKQV
 KTW FQNQRMKCKRWQKNQWLKTSNGLIQKGSAPVEYPSIHCSYPQGYLVNASGSLSMWGSQTWNTPTWSS
 QTWNTPTWNNQTWNTPTWSSQAWTAQSWNGQPWNAAPLHNF GEDFLQPYVQLQQNF SASDLEVNLEATRE
 SHAHFSTPQALELFLNYSVTPPGEI

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1842_d08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_028016

ORF Size: 915 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 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.

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_028016.3](#), [NP_082292.1](#)

RefSeq Size: 1356 bp

RefSeq ORF: 918 bp

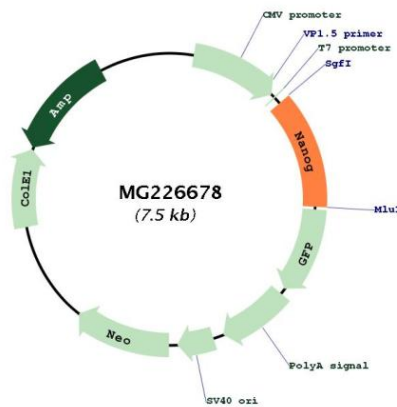
Locus ID: 71950

UniProt ID: [Q80Z64](#)

Cytogenetics: 6 F1

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. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]

Product images:



Circular map for MG226678