

Product datasheet for **MG225276**

Nog (NM_008711) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nog (NM_008711) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Nog
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG225276 representing NM_008711
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCGCTGCCCCAGCCTGGGGGTCACCCTCTACGCCCTGGTGGTGGTCTGGGGCTGCGGGCAGCAC
CAGCCGGCGGCCAGCACTATCTACACATCCGCCAGCACCCAGCGACAACCTGCCCTGGTGGACCTCAT
CGAACATCCAGACCCTATCTTTGACCCTAAGGAGAAGGATCTGAACGAGACGCTGCTGCGCTCGCTGCTC
GGGGCCACTACGACCCGGGCTTTATGGCCACTTCGCCCCAGAGGACCGACCCGGAGGGGGCGGGGAC
CGCTGGAGGTGCCGAGGACCTGGCGGAGCTGGACCAGTGTGCGGCAGCGGCCGTCGGGGCCATGCC
GAGCGAGATCAAAGGGCTGGAGTTCTCCGAGGGCTTGGCCCAAGGCAAGAAACAGCGCCTGAGCAAGAAG
CTGAGGAGGAAGTTACAGATGTGGCTGTGGTACACAGACCTTCTGCCCGGTGCTGTACGCGTGAATGACC
TAGGCAGCCGCTTTTGGCCACGCTACGTGAAGGTGGGAGCTGCTTACGCAAGCGCTCCTGCTCTGTGCC
CGAGGGCATGGTGTGTAAGCCATCCAAGTCTGTGCACCTCACGGTGTGCGGTGGCGCTGTACGCGGCGC
GGGGTACAGCGCTGCGGTGGATTCCCATCCAGTACCCCATATTTCCGAGTGTAAGTGTTCCTGC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG225276 representing NM_008711
Red=Cloning site Green=Tags(s)

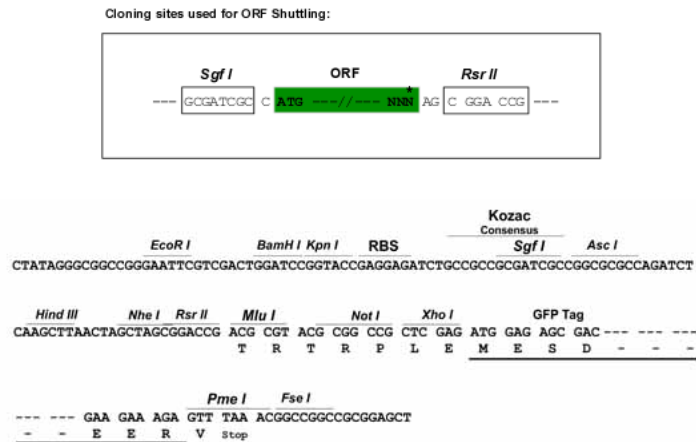
MERCPSLGVTLTYALVVVLGLRAAPAGGQHYLHIRPAPSDNLLPLVDLIEHPDPIFDPKEKDLNETLLRSL
GGHYDPGFMATSPPEDRPGGGGPPAGGAEDLAELDQLLRQPSGAMPSEIKGLEFSEGLAQGKKQRLSKK
LRRKLMWLWSQTFCPVLYAWNLDLSRFWPRYVKVGSFCF SKRSCSVPEGMVCKPSKVHLLTVLRWRCQRR
GGQRCGWIPIQYPII SECKCSC

SGP**TRRRLE** - GFP Tag - V



Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_008711

ORF Size: 696 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).

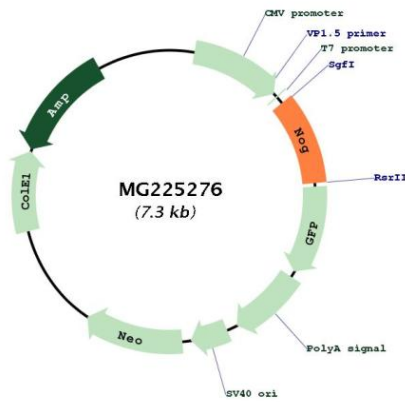
Reconstitution Method:

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_008711.2, NP_032737.1](#)
 RefSeq Size: 1922 bp
 RefSeq ORF: 699 bp
 Locus ID: 18121
 UniProt ID: [P97466](#)
 Cytogenetics: 11 54.34 cM

Gene Summary: Essential for cartilage morphogenesis and joint formation. Inhibitor of bone morphogenetic proteins (BMP) signaling which is required for growth and patterning of the neural tube and somite (PubMed:9585504, PubMed:9603738). Inhibits chondrocyte differentiation through its interaction with GDF5 and, probably, GDF6 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG225276