

Product datasheet for **RC209553**

NOP2 (NM_006170) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NOP2 (NM_006170) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NOP2
Synonyms:	NOL1; NOP120; NSUN1; p120
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC209553 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGGCGCAAGTTGACCCTACGAAGGAGAAGCGGGGGCCAGGCCGAAAGGCCCGAAGCAGAAGGGTG
 CCGAGACAGAAGCTCGTCAGATTCTGCCTGCAGTAAGTGACGAAAATTCCAAGAGGCTGTCTAGTCGTGC
 TCGAAAGAGGGCAGCCAAGAGGAGATTGGGCTCTGTTGAAGCCCTAAGACAAATAAGTCTCCTGAGGCC
 AAACCTATGCCTGAAAGCTACCAAAAGGAGCTGTCCAGACAGCTGGTAAGAAGGGACCCAGTCCCTAT
 TTAATGCTCCTCGAGGCAAGAAGCGCCAGCACCTGGCAGTGTAGGAAAGAGGAGGAGGAAGACTCTGA
 AGAAGATGGTATGGTGAACCACGGGACCTCTGGGGCTCCGAGGACGATGCTGATACGGTAGATGACTAT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC209553 protein sequence
Red=Cloning site Green=Tags(s)

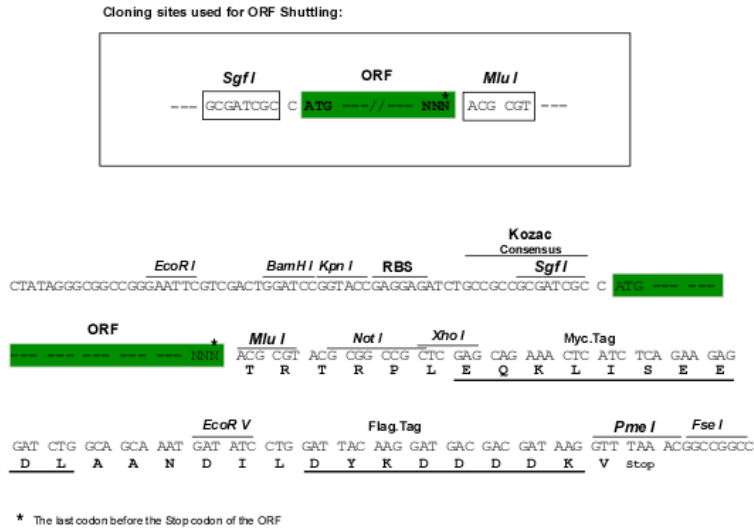
MGRKLDPTKEKRGPGRKARKQKGAETELVRFLPAVSDENSKRLSSRARKRAAKRRLGSVEAPKTNKSPEA
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IGATPEYLAGHYMLQGASSMLPVMALAPQEHERILDMCCAPGGKTSYMAQLMKNTGVILANDANAERLKS
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LLSAIDSVNATSKTGGYLVYCTCSITVEENEWVDYALKKRNRLVPTGLDFGQEGFTRFRERRFHPSLR
STRRFYPHTNMDFGFFIAKFKFSNSIPQSQTGNSETATPTNVDLPQVIPKSENSSQPAKKAKGAAKTQ
QLQKQHPKASFQKLNIGISKGADSELSTVPSVTKTQASSFQDSSQPAGKAEGIREPKVTGKLRSPK
LQSSKKVAFLRQNAPPKGTDTQTPAVLSPSKTQATLKPDKHHQPLGRAKGVEKQQLPEQPFKAAAFQKQN
DTPKGPQPPTVSPIRSSRPPPAKRKKSQSRGNSQLLLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6600_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006170

ORF Size: 2424 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_006170.4](#)

RefSeq Size: 2704 bp

RefSeq ORF: 2427 bp

Locus ID: 4839

UniProt ID: [P46087](#)

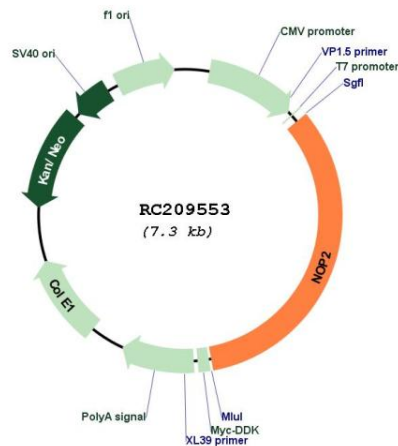
Cytogenetics: 12p13.31

Domains: Nol1_Nop2_Sun

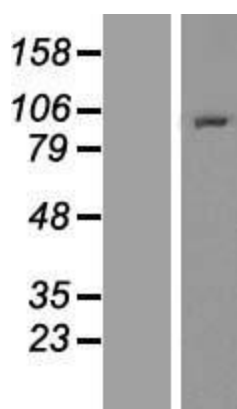
MW: 89 kDa

Gene Summary: Involved in ribosomal large subunit assembly (PubMed:24120868). S-adenosyl-L-methionine-dependent methyltransferase that specifically methylates the C(5) position of cytosine 4447 in 28S rRNA (Probable). May play a role in the regulation of the cell cycle and the increased nucleolar activity that is associated with the cell proliferation (Probable).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC209553



Western blot validation of overexpression lysate (Cat# [LY422416]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC213776] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).