

Product datasheet for **RC213776**

NOP2 (NM_001033714) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NOP2 (NM_001033714) 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:

>RC213776 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCGCAAGTTGGACCTACGAAGGAGAAGCGGGGGCCAGGCCGAAAGGCCCGAAGCAGAAGGGTG
 CCGAGACAGAACTCGTCAGATTCTGCCTGCAGTAAGTGACGAAAATTCCAAGAGCTGTCTAGTCGTGC
 TCGAAAGAGGGCAGCCAAGAGGAGATTGGGCTCTGTTGAAGCCCTAAGACAAATAAGTCTCCTGAGGCC
 AAACCTATGCCTGGAAAGCTACCAAAAGGAGCTGTCCAGACAGCTGGTAAGAAGGGACCCAGTCCCTAT
 TTAATGCTCCTCGAGGCAAGAAGCGCCAGCACCTGGCAGTGTAGGAAAGAGGAGGAGGAAGACTCTGA
 AGAAGATGGTATGGTGAACCACGGGACCTCTGGGGCTCCGAGGACGATGCTGATACGGTAGATGACTAT
 GGAGCTGACTCCAACCTGAGGATGAGGAGGAAGGTGAAGCGTTGCTGCCATTGAAAGAGCTGCTCGGA
 AGCAGAAGGCCCGGAAGCTGCTGCTGGGATCCAGTGGAGTGAAGAGGAGACCGAGGACGAGGAGGAAGA
 GAAAGAAGTGACCCCTGAGTCAGGCCCCCAAAGGTGGAAGAGGCAGATGGGGCCCTGCAGATCAATGTG
 GATGAGGAACCATTTGTGCTGCCCCCTGCTGGGGAGATGGAGCAGGATGCCAGGCTCCAGACCTGCAAC
 GAGTTCACAAGCGGATCCAGGATATTGTGGGAATTCTGCGTGATTTTGGGGCTCAGCGGGAGGAAGGGCG
 GTCTCGTTCTGAATACCTGAACCGGCTCAAGAAGGATCTGGCCATTTACTACTCCTATGGAGACTTCCTG
 CTTGGCAAGCTCATGGACCTCTTCCCTCTGTCTGAGCTGGTGGAGTTCTTAGAAGCTAATGAGGTGCCTC
 GGCCCGTCACCCCTCCGGACCAATACCTTGAACCCGACGCCGAGACCTTGCACAGGCTCTAATCAATCG
 TGGGGTTAACCTGGATCCCCTGGCAAGTGGTCAAAGACTGGACTAGTGGTGTATGATTCTTCTGTGCC
 ATTTGGTGTACCCCGAGTACCTGGCTGGGCACTACATGCTGCAGGGAGCCTCCAGCATGTTGCCCGTCA
 TGGCCCGCAGCTGATGAAGAACACGGGTGTGATCCTTGCCAATGACGCCAATGCTGAGCGGCTCAAGAGT
 GTTGTGGGCAACTTGCATCGGCTGGGAGTCACCAACACCATTATCAGCCACTATGATGGGCGCCAGTTCC
 CCAAGGTGGTGGGGGCTTTGACCGAGTACTGCTGGATGCTCCCTGCAGTGGCACTGGGGTCACTCCAA
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 CTCCTGAGTGCTATTGACTCTGTCAATGCGACCTCCAAGACAGGAGGCTACCTGGTTTACTGCACCTGTT
 CTATCACAGTAGAAGAGAATGAGTGGTGGTAGACTATGCTCTGAAAAAGAGGAATGTGCGACTGGTGCC
 CACGGCCTAGACTTTGGCCAGGAAGGTTTACCCTGTTTCGAGAAAGGCGCTTCCACCCAGTCTGCGT
 TCTACCCGACGCTTCTACCCTCATACCCACAATATGGATGGGTTCTTATTGCCAAGTTCAAGAAATTTT
 CCAATTCTATCCCTCAGTCCCAGACAGGAAATCTGAAACAGCCACACCTACAAATGTAGACTTGCCTCA
 GGTCAATCCCAAGTCTGAGAACAGCAGCCAGCCAGCCAAGAAAGCCAAGGGGGCTGCAAAGACAAAGCAG
 CAGCTGCAGAAACAGCAACATCCCAAGAAGGCCTCCTTCCAGAAGCTGAATGGCATCTCCAAAGGGGCGAG
 ACTCAGAAATGTCCACTGTACCTTCTGTCAAAAGACCAAGCTTCTCCAGCTTCCAGGATAGCAGTCA
 GCCAGCTGGAAGGCGAAGGGATCAGGGAGCCAAAGGTGACTGGGAAGCTAAAGCAACGATCACCTAAA
 TTACAGTCTCCAAGAAAGTTGCTTTCCTCAGGCAGAAAGCCCTCCCAAGGGCACAGACACACAAACAC
 CGGCTGTGTTATCCCATCCAAGACTCAGGCCACCCTGAAACCTAAGGACCATCATCAGCCCTTGAAG
 GGCCAAGGGGTTGAGAAGCAGCAGTTGCCAGAGCAGCCTTTTGAAGAAAGCTGCCTTCCAGAAACAGAAT
 GATACCCCAAGGGCCCTCAGCCTCCACTGTGTCTCCATCCGTTCCAGCCGCCCCACCAGCAAAGA
 GGAAGAAATCTCAGTCCAGGGGCAACAGCCAGCTGCTGCTATCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213776 protein sequence
Red=Cloning site Green=Tags(s)

MGRKLDPTKEKRGPGRKARKQKGAETELVRFLPAVSDENSKRLSSRARKRAAKRRLGSVEAPKTNKSPEA
KPLPGKLPKGA VQTAGKKGPQSLFNAPRGKKRPAPGSDEEEEEEDSEEDGMVNHGDLWGSEDDADTVDDY
GADSNSEDEEEGEALLPIERAARKQKAREAAAGIQWSEEEETEDEEEKEVTPESGPPKVEEADGGLQINV
DEEPPFVLPAGEME QDAQAPDLQRVHKRIQDIVGILRDFGAQREEGRSRSEYLNRLKKDLAIYYSYGDFL
LGKLMDFPLSELVEFLEANEVPRPVTLRTNTLKTRRRDLA QALINRGVNLDP L GKWSKTGLVVYDSSVP
IGATPEYLAGHYMLQGASSMLPVMALAPQEHERILDMCCAPGGKTSYMAQLMKNTGVILANDANAERLKS
VVGNLHRLGVTNTIISHYDGRQFPKVVGGFDRVLLDAPCSGTGVI SKDPAVKTNKDEKDILRCAHLQKEL
LLSAIDSVNATSKTGGYLVYCTCSITVEENEWVDYALKKRNRLVPTGLDFGQEGFTRFRERRFHPSLR
STRRFYPHTNMDFGFFIAKFKFSNSIPQSQTGNSETATPTNVDLPQVIPKSENSSQPAKKAKGAAKTQ
QLQKQQHPKASFQKLNIGISKGADSELSTVPSVTKTQASSFQDSSQPAGKAEGIREPKVTGKLRSPK
LQSSKKVAFLRQNAPPKGTDTQTPAVLSPSKTQATLKP KDHHQPLGRAKGVEKQQLPEQPFKAAAFQKQN
DTPKGPQPPTVSPIRSSRPPPAKRKKSQSRGNSQLLLS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001033714

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_001033714.3](#)

RefSeq Size: 2772 bp

RefSeq ORF: 2427 bp

Locus ID: 4839

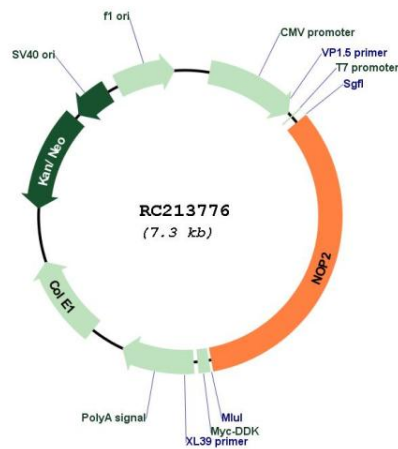
UniProt ID: [P46087](#)

Cytogenetics: 12p13.31

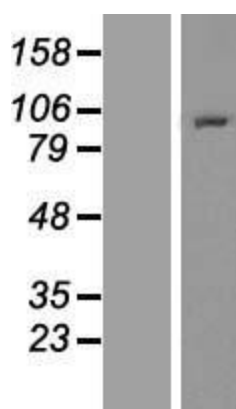
MW: 89 kDa

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 RC213776



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]).