OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC234920

NOP2 (NM_001258308) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NOP2 (NM_001258308) 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)

ORF Nucleotide Sequence:

>RC234920 representing NM_001258308
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCGCAAGTTGGACCCTACGAAGGAGAAGCGGGGGCCAGGCCGAAAGGCCCGGAAGCAGAAGGGTG
CCGAGACAGAACTCGTCAGATTCTTGCCTGCAGTAAGTGACGAAAATTCCAAGAGGCTGTCTAGTCGTGC
TCGAAAGAGGGCAGCCAAGAGGAGATTGGGCTCTGTTGAAGCCCCTAAGACAAATAAGTCTCCTGAGGCC
AAACCATTGCCTGGAAAGCTACCAAAAGGGATCTCTGCAGGAGCTGTCCAGACAGCTGGTAAGAAGGGAC
CCCAGTCCCTATTTAATGCTCCTCGAGGCAAGAAGCGCCCAGCACCTGGCAGTGATGAGGAAGAGGAGGA
GGAAGACTCTGAAGAAGATGGTATGGTGAACCACGGGGACCTCTGGGGCTCCGAGGACGATGCTGATACG
GTAGATGACTATGGAGCTGACTCCAACTCTGAGGATGAGGAGGAAGGTGAAGCGTTGCTGCCCATTGAAA
GAGCTGCTCGGAAGCAGAAGGCCCGGGAAGCTGCTGCTGGGATCCAGTGGAGTGAAGAGGAGACCGAGGA
CGAGGAGGAAGAGAAAGAAGTGACCCCTGAGTCAGGCCCCCCAAAGGTGGAAGAGGCAGATGGGGGCCTG
CAGATCAATGTGGATGAGGAACCATTTGTGCTGCCCCCTGCTGGGGAGATGGAGCAGGATGCCCAGGCTC
CAGACCTGCAACGAGTTCACAAGCGGATCCAGGATATTGTGGGAATTCTGCGTGATTTTGGGGCTCAGCG
GGAGGAAGGGCGGTCTCGTTCTGAATACCTGAACCGGCTCAAGAAGGATCTGGCCATTTACTACTCCTAT
GGAGACTTCCTGCTTGGCAAGCTCATGGACCTCTTCCCTCTGTCTGAGCTGGTGGAGTTCTTAGAAGCTA
ATGAGGTGCCTCGGCCCGTCACCCTCCGGACCAATACCTTGAAAACCCGACGCCGAGACCTTGCACAGGC
TCTAATCAATCGTGGGGTTAACCTGGATCCCCTGGGCAAGTGGTCAAAGACTGGACTAGTGGTGTATGAT
TCTTCTGTGCCCATTGGTGCTACCCCCGAGTACCTGGCTGGGCACTACATGCTGCAGGGAGCCTCCAGCA
TGTTGCCCGTCATGGCCTTGGCACCCCAGGAACATGAGCGGATCCTGGACATGTGTTGTGCCCCTGGAGG
AAAGACCAGCTACATGGCCCAGCTGATGAAGAACACGGGTGTGATCCTTGCCAATGACGCCAATGCTGAG
CGGCTCAAGAGTGTTGTGGGCAACTTGCATCGGCTGGGAGTCACCAACACCATTATCAGCCACTATGATG
GGCGCCAGTTCCCCAAGGTGGTGGGGGGCTTTGACCGAGTACTGCTGGATGCTCCCTGCAGTGGCACTGG
GGTCATCTCCAAGGATCCAGCCGTGAAGACTAACAAGGATGAGAAGGACATCCTGCGCTGTGCTCACCTC
CAGAAGGAGTTGCTCCTGAGTGCTATTGACTCTGTCAATGCGACCTCCAAGACAGGAGGCTACCTGGTTT
ACTGCACCTGTTCTATCACAGTAGAAGAGAATGAGTGGGTGGTAGACTATGCTCTGAAAAAGAGGAATGT
GCGACTGGTGCCCACGGGCCTAGACTTTGGCCAGGAAGGTTTTACCCGCTTTCGAGAAAGGCGCTTCCAC
CCCAGTCTGCGTTCTACCCGACGCTTCTACCCTCATACCCACAATATGGATGGGTTCTTCATTGCCAAGT
TCAAGAAATTTTCCAATTCTATCCCTCAGTCCCAGACAGGAAATTCTGAAACAGCCACACCTACAAATGT
AGACTTGCCTCAGGTCATCCCCAAGTCTGAGAACAGCAGCCAGCCAGCCAAGAAAGCCAAGGGGGCTGCA
AAGACAAAGCAGCAGCTGCAGAAACAGCAACATCCCAAGAAGGCCTCCTTCCAGAAGCTGAATGGCATCT
CCAAAGGGGCAGACTCAGAATTGTCCACTGTACCTTCTGTCACAAAGACCCAAGCTTCCTCCAGCTTCCA
GGATAGCAGTCAGCCAGCTGGAAAAGCCGAAGGGATCAGGGAGCCAAAGGTGACTGGGAAGCTAAAGCAA
CGATCACCTAAATTACAGTCCTCCAAGAAAGTTGCTTTCCTCAGGCAGAATGCCCCTCCCAAGGGCACAG
ACACACAAACACCGGCTGTGTTATCCCCATCCAAGACTCAGGCCACCCTGAAACCTAAGGACCATCATCA
GCCCCTTGGAAGGGCCAAGGGGGTTGAGAAGCAGCAGTTGCCAGAGCAGCCTTTTGAGAAAGCTGCCTTC
CAGAAACAGAATGATACCCCCAAGGGGCCTCAGCCTCCCACTGTGTCTCCCATCCGTTCCAGCCGCCCCC
CACCAGCAAAGAGGAAGAAATCTCAGTCCAGGGGCAACAGCCAGCTGCTGCTATCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

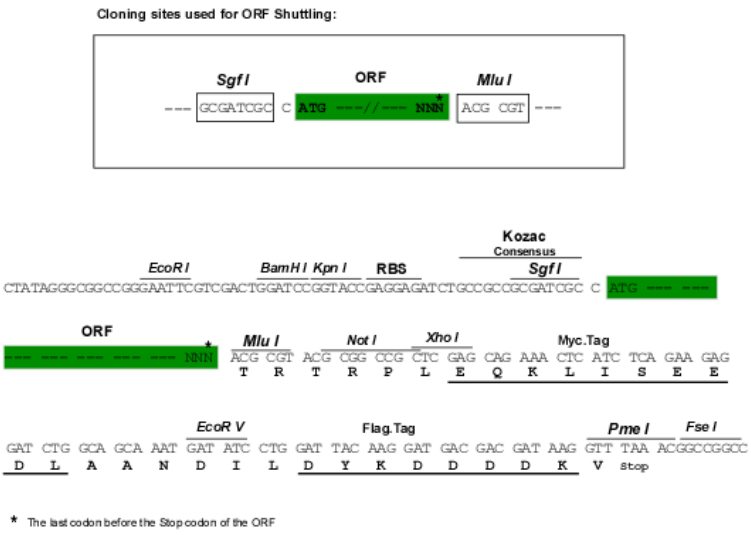
>RC234920 representing NM_001258308
Red=Cloning site Green=Tags(s)

MGRKLDPTKEKRGPGRKARKQKGAETELVRFLPAVSDENSKRLSSRARKRAAKRRLGSVEAPKTNKSPEA
KPLPGKLPKGISAGAVQTAGKKGPQSLFNAPRGKKRPAPGSDEEEEEEDSEEDGMVNHGDLWGSEDDADT
VDDYGADSNSEDEEEGEALLPIERAARKQKAREAAAGIQWSEEETEDEEEEKEVTPESGPPKVEEADGGL
QINVDEEPFVLPPAGEMEQDAQAPDLQRVHKRIQDIVGILRDFGAQREEGRSRSEYLNRLKKDLAIYYSY
GDFLLGKLMDLFPLSELVEFLEANEVPRPVTLRTNTLKTRRRDLAQALINRGVNLDPLGKWSKTGLVVYD
SSVPIGATPEYLAGHYMLQGASSMLPVMALAPQEHERILDMCCAPGGKTSYMAQLMKNTGVILANDANAE
RLKSVVGNLHRLGVTNTIISHYDGRQFPKVVGGFDRVLLDAPCSGTGVISKDPAVKTNKDEKDILRCAHL
QKELLLSAIDSVNATSKTGGYLVYCTCSITVEENEWVVDYALKKRNVRLVPTGLDFGQEGFTRFRERRFH
PSLRSTRRFYPHTHNMDGFFIAKFKKFSNSIPQSQTGNSETATPTNVDLPQVIPKSENSSQPAKKAKGAA
KTKQQLQKQQHPKKASFQKLNGISKGADSELSTVPSVTKTQASSSFQDSSQPAGKAEGIREPKVTGKLKQ
RSPKLQSSKKVAFLRQNAPPKGTDTQTPAVLSPSKTQATLKPKDHHQPLGRAKGVEKQQLPEQPFEKAAF
QKQNDTPKGPQPPTVSPIRSSRPPPAKRKKSQSRGNSQLLLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001258308
ORF Size:	2436 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_001258308.2

RefSeq Size: 2716 bp

RefSeq ORF: 2439 bp

Locus ID: 4839

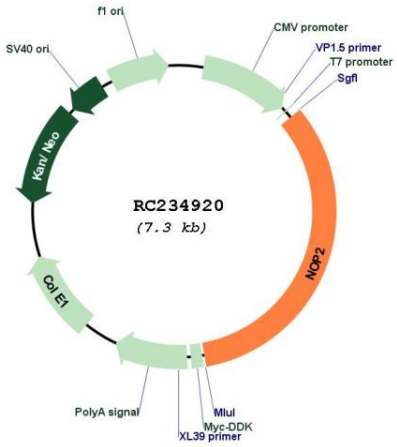
UniProt ID: P46087

Cytogenetics: 12p13.31

MW: 89.8 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 RC234920