

Product datasheet for **MR220146**

Nsun2 (NM_145354) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nsun2 (NM_145354) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nsun2
Synonyms:	D13Wsu123e; Misu
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR220146 representing NM_145354
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCGGGCGGGCGGGGCCGGGTTCCAGCAGCCGCGCAGCCTGAGGGCGAGGAAGACGCCAGCG
 ACGGCGGCAGAAAGCGAGGCCAGGCGGGCTGGGAAGGTGGCTATCCCGAGATCGTAAAGGAGAACAAGCT
 CTTTCGAGCACTACTATCAGGAACTCAAGATCGTGCCAGAGGGAGAATGGGACCAATTCATGGAGTCACTC
 CGAGAACCTCTCCAGCCACACTGAGAATCACTGGGTACAAAAGCCATGCCAAAGAGATTCTCCATTGCT
 TGAAGAACAAGTACTTTAAGGAGTTGGAGGACCTGGAAGTAGATGGACAGAAAAGTTGAAGTTCCACAACC
 ACTAAGCTGGTACCCTGAAGAATTGCCTGGCATACAAACCTTAAGTCGAAAAATCTTGAGGAAGTCCCCG
 TTGTTGGCAAAGTCCATCAGTTCCTGGTCAGCGAGACTGAGTCTGGAACATCAGCCGCCAGGAGGCTG
 TCAGCATGATCCCCCACTGCTGCTCAACGTGGAGCCACACCATAAGATCTTAGACATGTGTGCAGCCCC
 TGGATCCAAGACCACACAGTTAATTGAAATGTTGCATGCAGACATGAGTGTGCCCTTTCCAGAGGGATTT
 GTAATCGCAAATGACGTGGACAACAAGCGCTGCTATCTGCTCGTCCATCAGGCCAAAAGGTTGAGCAGTC
 CCTGCATCATGGTGGTAAACCATGACGCATCCAGCATACTAGACTTACAGTAGATGTGGACGGAAGGAA
 AGAGATTCTCTTATGATCGAATTTTATGTGATGTCCCTTGCACTGGCGATGGCACAATGAGAAAAAC
 ATTGATGTCTGGAAGAAATGGACAACCTTAAACAGCTTGCACTCCATGGCCTGCAGCTTCGGATTGCAA
 CTCGAGGTGCTGAGCAGCTGGCGGAAGGTGGCAGGATGGTGTATTCCACGTGTTCCCTGAACCCCGTGG
 GGATGAAGCAGTATCGCAGCTCTGCTAGAGAAGAGTGAAGGAGCTCTTGAGCTTGCTGATGTGTCTGCT
 GAGTTGCCAGGACTGAAGTGGATGCCTGGAGTCTCACAGTGAAGGTGATGACTAGAGACGGGCAAGTGGT
 TTGCAGACTGGCATGAGGTTCCCGAGGGCAGGCATACACAAATCCGACCTACCATGTTCCACCAACGGA
 CCTGGAGAAGCTACAGGCAATGCATCTAGAGCGATGCCTTCGAATCCTGCCCATCATCAGAATACTGGA
 GGGTCTTTGTGGCAGTATTGGTCAAGAAAGCACAATGCCGTGGAACAACGTCAGCCCAAGGTCCAGA
 ATAAATCTGCAGAAGCCAGAGAACCAGGGTATCCAGCCATGTGGCTGCCACAGAGGGAAATCCCAGTGA
 CCAGTCTGAGCTGGAAAGTCAAGTATAACTGGAGCTGGTACTCAGAAACAGCTCACAACACTGAGAAC
 ACAGAGAGCAATGAGAAGAAAGATGGCGTGTGGCCCTCCTCCATCAAAGAAAATGAAGTTGTTTGGAT
 TAAAGAAGATCCATTTGATTCATTCTGAAGATGATCCTTTATTTCCACCTATTGAGAAGTTTATGC
 CTTGGATCCTTCATTCAGGATGAATCTGTTAACCCGAACCACAGAAGGAAAGAGCGGCAGCTTTAT
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 ATATACATTGTATCCATTTATCAATTCAAGAATCATCACTGTATCAATGGAAGACGTGAAGACACTGTTG
 ACCCAGGAGAACCATTCTTTAGAAAACAGCAGTGGAGGCTACAGTCAAGTCAAGGACCTTGCAAAGG
 GAAGTGTGTGCTGAAGTATGAGCCAGATTCTGCGAATCCAGACACCCTCCAGTGCCCCATCGTGTGTG
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 CAGAGCAGCTGGAGATGAGGATGCCAAGCAGACAGCACAAGACCCTGCGTCCCAGACTCCGTCCTGG
 CTGTGATGCAGCTGCAGCTGAGCCATCCCGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR220146 representing NM_145354
 Red=Cloning site Green=Tags(s)

MGRRRARGRRFQQPPQPEGEEDASDGGRKRGQAGWEGGYEIVKENKLFHYYQELKIVPEGEWDQFMESL
 REPLPATLRITGYKSHAKEILHCLKNKYFKELEDLEVDGQKVEVPQPLSWYPEELAWHTNLSRKILRKSP
 LLAKFHQFLVSETESGNI SRQEAVSMIPPLLLNVEPHHKILDMCAAPGSKTTQLIEMHADMSVFPPEGF
 VIANDVDNKRCYLLVHQAKRLSSPCIMVNVHDASSIPRLTVDVDGRKEILFYDRILCDVPCSGDGTMRKN
 IDVWKKWTTLNSLQLHGLQLRIATRGAELAEGRMVYSTCSLNPVEDEAVIAALLEKSEGALELADVSA
 ELPGLKWMPGVSQWKVMTRDGGWFADWHEVPQGRHTQIRPTMFPPTDLEKLQAMHLERCLRILPHHQNTG
 GFFVAVLVKKAPMPWNRQPKVQNKSAEAREPRVSSHVAATEGNPSDQSELESQMITGAGDSEHTANTEN
 TESNEKKDGVCGPPPSKKMKLFGFKEDPFVFIPEDDPLFPIEKFYALDPSFPRMNLTRTTEGKKRQLY
 MYSKELRNVLNNEKMKVINTGIKVVCRNNSGEEFDCAFRLAQEGIYTLYPFINSRIITVSMEDVKTLT
 TQENPFFRKLSSSEAYSQVKDLAKGSVVLKYEPDSANPDTLQCPIVLCGWRGKASIRTFVPKNERLHYLRM
 MGLEVLGEKKKEGVILT NENAASPEQPGEDEAKQTAQDPCVPDSVPGCDAAAAEPSR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_145354

ORF Size: 2271 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_145354.5](#), [NP_663329.3](#)

RefSeq Size: 4279 bp

RefSeq ORF: 2274 bp

Locus ID: 28114

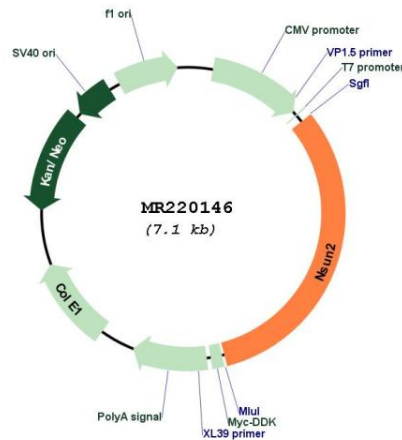
UniProt ID: [Q1HFZ0](#)

Cytogenetics: 13 35.55 cM

MW: 85.9 kDa

Gene Summary: RNA methyltransferase that methylates tRNAs, and possibly RNA polymerase III transcripts. Methylates cytosine to 5-methylcytosine (m5C) at positions 34 and 48 of intron-containing tRNA(Leu)(CAA) precursors, and at positions 48, 49 and 50 of tRNA(Gly)(GCC) precursors (By similarity). May act downstream of Myc to regulate epidermal cell growth and proliferation. Required for proper spindle assembly and chromosome segregation, independently of its methyltransferase activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR220146