

Product datasheet for **RG204612**

NSUN3 (NM_022072) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	NSUN3
Synonyms:	MST077; MSTP077
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG204612 representing NM_022072
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGACCCAGCTGAAAGCAAATCAGAGGGGAAGCTTGCAAAACAGATTGCAAAGTTGTGTTGGATC
ATTTTGAAAAACAGTATTCCAAAGAACTCGGAGATGCCTGGAATACAGTAAGGGAGATACTAACATCTCC
ATCATGCTGGCAATATGCTGTCCTGCTTAACCGATTCAATTATCCTTTGAACTGGAAGGATTACAT
TTGAAGGGCTATCACACTCTCTCAGGGATCTTACCCAATATCCTAAATCAGTGAAGTGTACCTTA
GCAGAACTCCGGGCGGAATCCCTTCAGAAAGACACCAAATTGGAACCTGAAAAATATTATCTCTAA
TGCTGCTTCTCTTCTCCAGTGTGGCTCTGGAATTAAGGGATGGGAGAAGGTTCTGGATCTCTGTGCT
GCTCCTGGAGGGAATCAATAGCTCTGCTGCAGTGTGCTTGTCCAGGTTATCTTATTGTAATGAATATG
ATAGTCTGAGATTGAGTGGCTAAGGCAGACGTTGGAATCTTTCATCCACAGCCTTTGATAAATGTAAT
TAAAGTGTCTGAATTGGATGGCAGAAAAATGGGAGATGCCAGCCTGAAATGTTTGACAAGGTGTTAGTG
GATGCTCCGTGTTCAAATGATCGAAGCTGGTTGTTTCTTCTGACTCTCAGAAGGCATCCTGTAGGATAA
GTCAAAGGAGGAATTTGCCTCTTCTACAGATAGAGCTGTTAAGGTCTGCAATTAAGGCCTTACGTCCTGG
AGGGATACTTGTATACTCTACATGCACGCTTTCCAAGGCAGAAAAATCAAGATGTGATCAGTGAAATTTTA
AACTCCACGGTAACATCATGCCTATGGACATTAAAGGAATAGCAAGGACTTGCTCCACGACTTCACAT
TTGCTCCCACTGGCCAGGAATGTGGCTCTTAGTGATTCCAGATAAGGGCAAAGCCTGGGGCCCAATGTA
TGTAGCCAAATTGAAGAAATCATGGAGCACAGGAAATGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



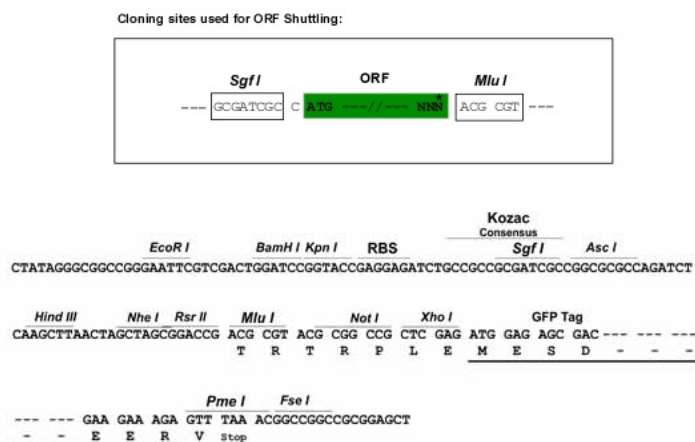
Protein Sequence: >RG204612 representing NM_022072
Red=Cloning site Green=Tags(s)

MLTLQKAKSEGLAKQICKVLDHFEKQYSKELGDAWNTVREILTSPSCWQYAVLLNRFNYPFELEKDLHLKGYHTLSQGSLPNYPKSVKCYLSRTPGRIPSERHQIGNLKKYLLNAASLLPVLALRLDGEKVLDLCAAPGKSDIALLQACCPGYLHCNEYDSLRLRLWLRLQTLSEFIPQPLINVIKVELDGRKMGDAQPEMFDKVLVDPGCSNARLFFSSDSQKASCRISSQRNRLPLQIELLRSAIKALRPGGILVYSTCTSLKSAENQDVISEILNSHGNIMPMDDIKGIARTCSHDFTFAPTGOECLGLVDPDKGAWGPMYVAKLKKSWSTGKW

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_022072

ORF Size: 1020 bp

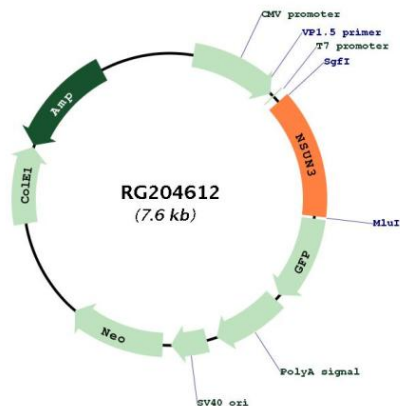
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_022072.5</u>
RefSeq Size:	1466 bp
RefSeq ORF:	1023 bp
Locus ID:	63899
UniProt ID:	<u>Q9H649</u>
Cytogenetics:	3q11.2
Domains:	Nol1_Nop2_Sun
Gene Summary:	Mitochondrial tRNA methyltransferase that mediates methylation of cytosine to 5-methylcytosine (m5C) at position 34 of mt-tRNA(Met) (PubMed:27497299, PubMed:27214402, PubMed:27356879). mt-tRNA(Met) methylation at cytosine(34) takes place at the wobble position of the anticodon and initiates the formation of 5-formylcytosine (f(5)c) at this position (PubMed:27497299, PubMed:27214402, PubMed:27356879). mt-tRNA(Met) containing the f(5)c modification at the wobble position enables recognition of the AUA codon in addition to the AUG codon, expanding codon recognition in mitochondrial translation (PubMed:27497299, PubMed:27356879).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG204612