

Product datasheet for **RG214656**

NUP98 (NM_139132) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NUP98 (NM_139132) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NUP98
Synonyms:	ADIR2; NUP96; Nup98-96; NUP196
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214656 representing NM_139132 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTAAACAATCATTGGAACACCCTTTGGGGTGGCACAGGTGGCTTTGGCACAACCTCAACATTTG
GACAGAATACTGGCTTTGGCACTACTAGTGGAGGGGCATTTGGAACATCTGCATTTGGTTCTAGCAACA
TACTGGAGGCTCTTTGGAAATTCACAGACTAAACCAGGAGGATTGTTTGAACCACTTCATTTAGCCAG
CCAGCTACCTCCACAAGCACTGGCTTTGGGTTTGGTACGTCAACAGGAACAGCAAATACCTTGTGGAA
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CTAACATACTCACCTTTGGAGACTCTCTCTCTCCGGAATCCGATGTCAGACCCTAAGAAGAAGGAAG
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ACTATGCCATGGACGAACTGCGCAGCCTTACCCAGTCCTATCTGCGAGAAGCTGGCTGTTGGGAGCCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG214656 representing NM_139132

Red=Cloning site Green=Tags(s)

MFNKSFGTFFGGGTGGFETTSTFGQNTGFGTSSGAFGTSFAGSSNNTGGLFGNSQTKPGGLFGTSSFSQ
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 SLAQSGDHRLLALLSQFVGSQSVRELLTMQLVDWHQLQADSF IQDERLRI FALLAGKPVVWLSEKKQIN
 VCSQLDWKRS LAIHLWYLLPPTASISRALSMYEEAFQNTSDSDRYACSP LPSYLEGSGCVIAEEQNSQTP
 LRDVCFHLLKLYSDSIREKAVRELLTRHCQLETPESWAKETFLTQKLRVPAKWIHEAKAVRAHMESDKH
 LEALCLFKAHWNRCHKLIIRHLASDAIINENYDYLKGFLEDLAPPERSSLIQDWETSGLVYLDYIRVIE
 MLRHIQQVDCSGNDLEQLHIKVTSLCSRIEQIQCYSAKDRLAQSDMAKRVANLLRVVLSLHHPDRTSDS
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TRTRPLE – GFP Tag – V

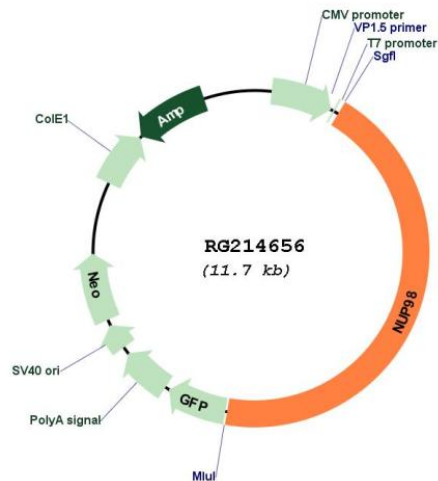
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_139132

ORF Size: 5178 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_139132.4](#)

RefSeq Size: 6758 bp

RefSeq ORF: 5181 bp

Locus ID: 4928

UniProt ID: [P52948](#)

Cytogenetics: 11p15.4

Protein Families: Druggable Genome

Gene Summary: Nuclear pore complexes (NPCs) regulate the transport of macromolecules between the nucleus and cytoplasm, and are composed of many polypeptide subunits, many of which belong to the nucleoporin family. This gene belongs to the nucleoporin gene family and encodes a 186 kDa precursor protein that undergoes autoproteolytic cleavage to generate a 98 kDa nucleoporin and 96 kDa nucleoporin. The 98 kDa nucleoporin contains a Gly-Leu-Phe-Gly (GLGF) repeat domain and participates in many cellular processes, including nuclear import, nuclear export, mitotic progression, and regulation of gene expression. The 96 kDa nucleoporin is a scaffold component of the NPC. Proteolytic cleavage is important for targeting of the proteins to the NPC. Translocations between this gene and many other partner genes have been observed in different leukemias. Rearrangements typically result in chimeras with the N-terminal GLGF domain of this gene to the C-terminus of the partner gene. Alternative splicing results in multiple transcript variants encoding different isoforms, at least two of which are proteolytically processed. Some variants lack the region that encodes the 96 kDa nucleoporin. [provided by RefSeq, Feb 2016]