

## Product datasheet for **RC207886**

### **NUP98 (NM\_139131) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NUP98 (NM_139131) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NUP98
Synonyms:	ADIR2; NUP96; Nup98-96; NUP196
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC207886 representing NM\_139131  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGTTTAAACAAATCATTGGAACACCCTTGGGGTGGCACAGGTGGCTTTGGCACAACCTCAACATTTG  
 GACAGAATACTGGCTTTGGCACTACTAGTGGAGGGCATTGGAAACATCTGCATTTGGTTCTAGCAACAA  
 TACTGGAGGCTCTTTGAAATTCACAGACTAAACCAGGAGGATTGTTTGAACAGTTCATTTAGCCAG  
 CCAGCTACCTCCACAAGCACTGGCTTTGGGTTTGGTACGTCAACAGGAACAGCAAATACCTGTTTGGAA  
 CTGCAAGCACAGGGACCAGTCTCTTCTCATCCAAAACAATGCCTTTGCACAAAAAAACCAACTGGCTT  
 TGGCAATTTTGAACCACTACTAGCAGTGGAGGACTCTTTGAACCACAAATACCACCTCTAATCCTTTT  
 GGCAGCACATCTGGCTCCCTCTTTGGGCAAGTAGTTTTACAGCTGCTCCTACTGGGACTACTATTAAT  
 TTAACCTCCAAGTACAGATACTATGGTCAAAGCTGGAGTTAGCACTAACATAAGTACCAAGCACCA  
 GTGTTACTGCTATGAAAGAATGAAAGCAAGTCACTAGAGGAACCTCGTTTAGAGGATTATCAGGCT  
 AACAGGAAGGGCCACAGAACCAGGTGGGAGCAGGTACCAACAACCTGGCTTGTGGTCTCTCCAGCCA  
 CTTCAGCGCAACAGGACTCTTCAGCTCCTCCACCACTAATTCAGGCTTGCATATGGTCAGAACAAAAAC  
 TGCTTTGGAAGTACTACAACCTGGATTTGGAACAAATCCAGGTGGTCTCTTTGGCCAACAGAATCAGCAG  
 ACTACCAGCCTCTTCAGCAAACCTTTGGCCAGGCTACAACCACCAGAACACTGGCTTTTCTTTGGTA  
 ATACCAGCACCATAGGACAGCCAAGCACCAACACCATGGGATCATTGGAGTAACCAAGCCTCACAGCC  
 TGGAGTCTTTTGGGACAGCTACAACACCAGCACTGGGACAGCATTGGAAACAGGAACAGGTCTCTTT  
 GGGCAGACCAACTGGATTTGGTGTCTGGTTCGACCCTGTTGGCAATAACAAGCTTACTACATTTG  
 GAAGCGGCACAACCAAGTGCACCTCATTGGTACAACCAAGTGGCGGCTCTTTGGTGGTGGCACAATA  
 CAGTGGGAATAGTATTTTGGAAAGTAAACCAGCACCTGGGACTCTTGAACCTGGGCTTGGTGCAGGATTT  
 GGAACAGCTCTTGGTGTGGACAGGCATCTTTGTTGGGAACAACCAACCTAAGATTGGAGGCTCTTG  
 GTACAGGAGCCTTTGGGGCCCTGGATTTAATACTACGACAGCCACTTTGGGCTTTGGAGCCCCCAGGC  
 CCCAGTAGCTTTGACAGATCCAAATGCTTCTGCTGCCAGCAGGCTGTTCTCCAGCAGCACATCAATAGT  
 CTAACATACTCACCTTTGGAGACTCTCTCTCTCCGGAATCCGATGTCAGACCCTAAGAAGAAGGAAG  
 AGAGATTGAAACCAACAAATCCAGCAGCCAGAAGGCTTACTACCTACTCATTATAAACTGACACC  
 CCGCCCTGCCACTAGAGTCCGGCAAAGGCTTTACAACAACAGGCACAGCCAAGTCACATCTTTGAT  
 GGGCTGGATGACGATGAACCATCCCTAGCCAATGGAGCATTGATGCCAAGAAGAGCATTAGAAGTTGG  
 TTTTGAAGAACCTTAATAATAGCAATCTTTTTCTCTGTTAATCGTGATTGAGAAAATCTAGCTTACC  
 ATCTGAATATCCAGAAAATGGAGAGAGATTTAGTTTCTAAGCAAACCTGTTGATGAGAATCACCAGCAG  
 GATGGAGATGAAGATTCCTTGTTCACATTTTATACTAACCTATTGCCAAACCTATTCTCAAACCC  
 CAGAAAGTGTGGAAATAAACACAGCAACAGCAACAGTGTGGATGATACCATTGTTGCATTAACATGCG  
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 GACCGAGAAGAAATAGAAAATAATTCTTACCATATGCCCCAGCAGGATATTCTCACTAAGGTTGGTT  
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 AAACAGGGAGCTCAATTCAAAGAATACCGGCTGAAACTGGTTCTTGGGTGTTTAAAGGCTCCCATTTTT  
 CTAAGTATGGCCTTCAGGATTCTGATGAAGAGGAGGAGGAGCATCCGCTAAAACAGTACAAAGAAGTT  
 GAAGACTGCTCCTTGCCTCCTGCAAGCCAGACTACGCCCTTGCAGATGGCTCTAATGGCAAACCTGCA  
 CCTCCACCTCAGGTAGAGAAAAAAGGACAG

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >RC207886 representing NM\_139131  
 Red=Cloning site Green=Tags(s)

MFNKSFGTTPFGGGTGGFGTTSTFGQNTGFGTSSGAFGTSAFGSSNNTGGLFGNSQTKPGGLFGTSSFSQ  
 PATSTSTGFGFGTSTGTANTLFGTASTGTLFSSQNNAFAQNKPTGFGNFGTSTSSGGLFGTNTTNSPF  
 GSTSGSLFGPSSFTAAPTGTTIKFNPPGTDTMVKAGVSTNISTKHQCITAMKEYESKSLEELRLEDYQA  
 NRKGPQNVGAGTTTGLFGSSPATSSATGLFSSSTTNSGFAYGQNKTAFGTSTTGFGTNPGLFGQQNQ  
 TTSLFSKPFQATTTQNTGFSFGNTSTIGQPSTNTMGSFVTAQSQPGGLFGTATNTSTGTAFGTGTGLF  
 GQNTGFGAVGSTLFGNNKLTTFGSGTTSAPSGTSSGGLFGFGTNTSGNSIFGSKPAPGLTGTGLGAGF  
 GTALGAGQASLFGNNQPKIGGPLGTGAFGAPGNTTATLFGGAPQAPVALTDPNAAAQAVLQQHINS  
 LTYSPFGDSPLFRNPMSPKKEERLKPNTNPAQKALTPPHYKLTTPRATRVRPKALQTTGTAKSHLFD  
 GLDDDEPSLANGAFMPKKSIIKLVLKNLNNSNLFSPVNRDSENLASPEYPERGERSFLSKPVDENHQQ  
 DGDEDSLVSFYTNPIAKPIPTPESAGNKHSNSNSVDDTIVALNMRAALRNGLEGSSEETFHDESLQD  
 DREEIENNSYHMHPAGIILTKVGYTIPSMDDLAKITNEKGECIVSDFTIGRKGYSIYFEGDVNLNLN  
 LDDIVHIRRKEVVVYLDNQQPPVGEGLNRKAEVTLDGWVPTDKTSRCLIKSPDLRADINYEGRLEAVSR  
 KQGAQFKEYRPETGSWVFKVSHFSKYGLQDSDEEEHPSTSTKLLKTAPLPPASQTTPLQMALNGKPA  
 PPPQVEKKGQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mg3978\\_a07.zip](https://cdn.origene.com/chromatograms/mg3978_a07.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM\_139131

ORF Size: 2760 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_139131.5](#)

**RefSeq Size:** 3778 bp

**RefSeq ORF:** 2763 bp

**Locus ID:** 4928

**UniProt ID:** [P52948](#)

**Cytogenetics:** 11p15.4

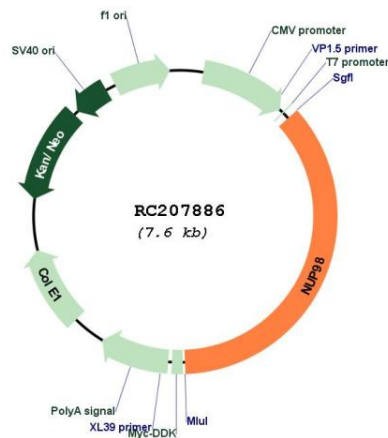
**Protein Families:** Druggable Genome

**MW:** 95.9 kDa

**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]

**Product images:**



Circular map for RC207886