

## Product datasheet for **MG207453**

### **Nup50 (NM\_016714) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Nup50 (NM_016714) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nup50
Synonyms:	1700030K07Rik; AI413123; Npap60
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG207453 representing NM\_016714  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGAAGAGAGTTGCGGAGAAGGAGTTGACTGACAGGAAGTGGGATGAGGAAGACGAAGTTGAAGAGA  
 TGGGAACATTCTCAGTGGCCAGTGAGGAAGTCATGAAGAACAGAGCCGTAAGAAGGCAAAAGCGCAGAAA  
 CGTTGGATTTGAATCTGATAGCGGAGGAGCCTTTAAAGGTTTCAAAGGTTTGGTTGTGCCTTCTGGAGGA  
 GGAGGTTTTCTGGATTTGGTGGCTCTGGAGGAAAGCCTCTGGAAGGACTGACAAATGGAACAGCACAG  
 ACAATGCCACGCCCTTCTCCAATGTAAGACAGCAGCAGAGCCCAAGGCAGCCTTTGGTTCTTTTGTCTGT  
 GAATGGCCCTACTACCTTGGTGGATAAAAAGATTTCAAGTCCCAATGCAATAACAGCAATCAGCCGCC  
 TCCTCCGGCCCTGCTCCAGTACCGCTGCCCTGGGAATGCCTATCACAAGCAGCTGGCTGGCTTGAAGT  
 GCTCCGTCGCGATTGGATAGTGAAGCAGTGAACACAAACCCGCTTTGTGACCTGACTCCCATTTTTAA  
 AGACTATGAGAGATACTTGGCGACGATCGAGAAGCAGCTTGAAGTGGAGCGGCAGCAGTTCTGAGAGC  
 CAGACAGACAGGGCGACGCTGGAATGGAGCCTCCTTCCCTTTTTGGTTCAAAAACTACAGCAAGAGT  
 CACCATTTTCATTTTCATGGCAACAAAGCGGAGGACACATCTGAAAAGGTGGAGTTTACAGCAGAAAAGAA  
 ATCGGACGCAGCACAAGGAGCAACAAGTGCCTCGTTTAGTTTTCGGCAAGAAAATTGAGAGCTCGGCTTTG  
 GGCTCGTTAAGCTCTGGCTCCCTAACTGGGTTTTCTATTCTCTGCTGGAAGCTCCAGCTTGTTTGGTAAAG  
 ATGCTGCCAGAGTAAAGCAGCCTTCTCGCTGTCTCTGCTAAAGCATCCGAGAGTCCGGCAGGAGGCGG  
 CAGCAGCGAGTGCAGAGATGGTGAAGAAGAGGAGAATGACGAGCCACCAAGGTAGTGGTGACCGAAGTA  
 AAGGAAGAGGATGCTTTCTACTCAAAAAATGTAAGTATTTTACAAGAAAGACAACGAATTTAAGAGA  
 AGGGTGTGGGGACCCTGCATTTAAAACCCACAGCAACTCAGAAGACCCAGCTCTTGGTGGCGGCAGACAC  
 CAACCTAGGCAACATACTGCTGAATGTTCTGATCGCCCCAACATGCCGTGCACCCGACAGGAAAAGAAC  
 AACGTCCTTATCGTCTGTGTCCCAACCCCACTCGATGAGAAGCAGCCCACTCTCCCGCCACCATG  
 TGATCCGGGTGAAGACGAGCGAGGATGCCGATGAATTGCACAAGATTTTACTGGAGAAAAAGGATGCC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207453 representing NM\_016714  
 Red=Cloning site Green=Tags(s)

MAKRVAEKELTDRNWDEEVEEMGTFSVASEEVMKNRAVKKAKRRNVGFESDSGGAFKGFKGLVVPSSG  
 GGFSGFGGSGGKPLEGLTNGNSTDNATPFSNVKTAAPKAAFGSFAVNGPTTLVDKKISSPKCNNSNQQP  
 SSGPASSTACPGNAYHKQLAGLNCVSRDWIVKHVNTNPLCDLTPIFKDYERYLATIEKQLENGGSSSES  
 QTD RATAGMEPPSLFGSTKLQESPF SFHGNKAEDTSEKVEFTAEEKSDAAQGATSASFSGKKIESSAL  
 GSLSSGSLTGFSFAGSSSLFGKDAQSKAASSLFSKASESPAGGSSSECRDGEENDEPPKVVVTEV  
 KEEDAFYSKCKLFYKKNDFEKEKGVGTLHLKPTATQKTQLLVRADTNLGNILLNLIAPNMPCTRTGKN  
 NVLIVCVNPPLDEKQPTLPATMLIRVKTSEDADELHKILLEKKA

**TRTRPLE** - GFP Tag - V

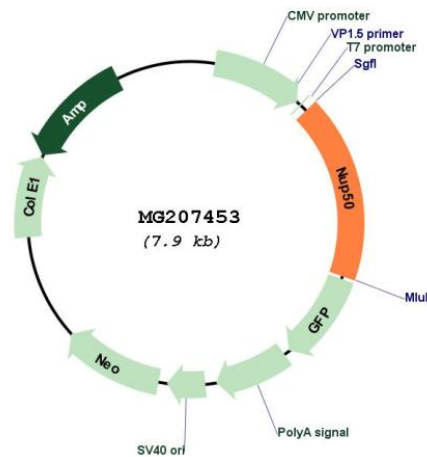
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_016714

ORF Size: 1398 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_016714.2</a> , <a href="#">NP_057923.2</a>
<b>RefSeq Size:</b>	4766 bp
<b>RefSeq ORF:</b>	1401 bp
<b>Locus ID:</b>	18141
<b>UniProt ID:</b>	<a href="#">Q9JIH2</a>
<b>Cytogenetics:</b>	15 40.25 cM
<b>Gene Summary:</b>	Component of the nuclear pore complex that has a direct role in nuclear protein import (PubMed:10811608). Actively displaces NLSs from importin-alpha, and facilitates disassembly of the importin-alpha:beta-cargo complex and importin recycling (PubMed:16222336). Interacts with regulatory proteins of cell cycle progression including CDKN1B (PubMed:10891500, PubMed:10811608). This interaction is required for correct intracellular transport and degradation of CDKN1B (PubMed:10811608).[UniProtKB/Swiss-Prot Function]