

## Product datasheet for **MG220782**

### **Rpl5 (NM\_016980) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rpl5 (NM\_016980) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Rpl5  
**Synonyms:** U21RNA  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG220782 representing NM\_016980  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGTTTGTGAAAGTTGTCAAGAATAAGGCCTACTTTAAAAGATACCAAGTGAGATTTTGAAGGCGGC  
GAGAGGGTAAAAGTACTACTATGCTCGAAAACGATTGGTGATCCAGGACAAGAATAAGTACAACACACC  
CAAATATAGGATGATAGTTTCGTGTAACACAGAGATATCATCTGCCAGATTGCATATGCCCGTATAGAA  
GGGGATATGATCGTCTGTGCAGCATATGCACATGAACTCCAAAATATGGTGTGAAAGTTGGCCTGACAA  
ATTATGCTGCAGCCTATTGCACTGGCCTGCTGCTGGCCCGCAGGCTTCTGAATAGTTTGGCATGGACAA  
GATCTATGAAGGCCAAGTGGAGGTGAATGGAGGTGAATACAATGTGGAAGCATTGACGGTCAGCCTGGT  
GCCTTCACTTGCTATCTGGATGCAGGTCTTGCCCGAACTACAAGTGGCAATAAAGTTTTTGGGGCCCTGA  
AGGGAGCTGTGGATGGAGGCTTGTCTATCCCTCATAGTACCAAACGATTCCCTGGTTATGACTCTGAAAAG  
CAAGGAGTTCAATGCAGAGGTACATCGGAAGCACATCATGGGTGAGAATGTGGCAGACTACATGCCTAC  
CTAATGGAGGAAGATGAAGATGCGTATAAGAAACAGTTCTCTCAGTACATCAAGAACAACGTAACCCAG  
ACATGATGGAGGAGATGTATAAGAAAGCTCATGCTGCTATCCGAGAGAATCCAGTCTATGAGAAGAAGCC  
CAAGAGAGAAGTGAAGAAGAAGAGGTGGAATCGTCCAAAATGTCTTTGCCAGAGAAGAAGATCGGGTT  
GCTCAAAAAGAAGCAAGCTTCTCAGAGCTCAGGAAAGGGCTGCTGAAAGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG220782 representing NM\_016980  
Red=Cloning site Green=Tags(s)

MGFVKVVKNKAYFKRYQVRFRRRREGKTDYYARKRLVIQDKNKYNTPKYRMIVRVTNRDIIQCIIAYARIE  
 GDMIVCAAAYAHLPKYGVKVGLTNYAAAAYCTGLLLARRLLNRFMDKIYEQQVEVNGGEYNVESIDGQPG  
 AFTCYLDAGLARTTTGNKVFGLKGAVDGGLSIPHSTKRFPGYDSEKFNAEVHRKHIMGQNVADYMRG  
 LMEEDDAYKKQFSQYIKNNVTPDMMEEMYKKAHAAIRENPVYEKKPKREVKKRWRNRPKMSLAQKKDRV  
 AQKKASFLRAQERAAES

TRTRPLE - GFP Tag - V

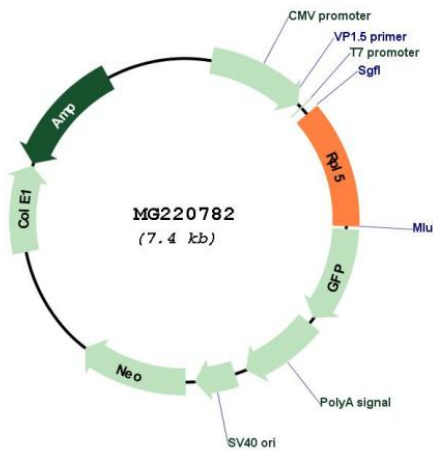
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_016980

**ORF Size:** 891 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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_016980.2</a> , <a href="#">NP_058676.1</a>
<b>RefSeq Size:</b>	2036 bp
<b>RefSeq ORF:</b>	894 bp
<b>Locus ID:</b>	100503670
<b>UniProt ID:</b>	<a href="#">P47962</a>
<b>Cytogenetics:</b>	5 52.23 cM
<b>Gene Summary:</b>	Component of the ribosome, a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell. The small ribosomal subunit (SSU) binds messenger RNAs (mRNAs) and translates the encoded message by selecting cognate aminoacyl-transfer RNA (tRNA) molecules. The large subunit (LSU) contains the ribosomal catalytic site termed the peptidyl transferase center (PTC), which catalyzes the formation of peptide bonds, thereby polymerizing the amino acids delivered by tRNAs into a polypeptide chain. The nascent polypeptides leave the ribosome through a tunnel in the LSU and interact with protein factors that function in enzymatic processing, targeting, and the membrane insertion of nascent chains at the exit of the ribosomal tunnel. As part of the 5S RNP/5S ribonucleoprotein particle it is an essential component of the LSU, required for its formation and the maturation of rRNAs. It also couples ribosome biogenesis to p53/TP53 activation. As part of the 5S RNP it accumulates in the nucleoplasm and inhibits MDM2, when ribosome biogenesis is perturbed, mediating the stabilization and the activation of TP53. Interacts with RRP1B.[UniProtKB/Swiss-Prot Function]