

Product datasheet for MR220782

Rpl5 (NM_016980) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rpl5 (NM_016980) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rpl5
Synonyms:	U21RNA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR220782 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGGTTTGTGAAAGTTGTCAAGAATAAGGCCTACTTTAAAAGATACCAAGTGAGATTTTGAAGGCGGC
GAGAGGGTAAAAGTACTACTATGCTCGAAAACGATTGGTGATCCAGGACAAGAATAAGTACAACACACC
CAAATATAGGATGATAGTTTCGTGTAACACAGAGATATCATCTGCCAGATTGCATATGCCCGTATAGAA
GGGATATGATCGTCTGTGCAGCATATGCACATGAACTCCAAAATATGGTGTGAAAGTTGGCCTGACAA
ATTATGCTGCAGCCTATTGCACTGGCCTGCTGCTGGCCCGCAGGCTTCTGAATAGTTTGGCATGGACAA
GATCTATGAAGGCCAAGTGGAGGTGAATGGAGGTGAATACAATGTGAAAAGCATTGACGGTCAGCCTGGT
GCCTTCACTTGCTATCTGGATGCAGGTCTTGCCCGAACTACAAGTGGCAATAAAGTTTTTGGGGCCCTGA
AGGGAGCTGTGGATGGAGGCTTGTCTATCCCTCATAGTACCAAACGATTCCCTGGTTATGACTCTGAAAAG
CAAGGAGTTCAATGCAGAGGTACATCGGAAGCACATCATGGGTGAGAATGTGGCAGACTACATGCGCTAC
CTAATGGAGGAAGATGAAGATGCGTATAAGAAACAGTTCTCTCAGTACATCAAGAACAACGTAATCCAG
ACATGATGGAGGAGATGTATAAGAAAGCTCATGCTGCTATCCGAGAGAATCCAGTCTATGAGAAGAAGCC
CAAGAGAGAAGTGAAGAAGAAGAGGTGGAATCGTCCCAAAATGTCTTTGCCCAGAAGAAGATCGGGTT
GCTCAAAAGAAGCAAGCTTCTCAGAGCTCAGGAAAGGGCTGCTGAAAGC

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR220782 protein sequence
Red=Cloning site Green=Tags(s)

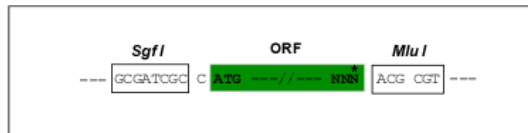
MGFVKVVKNKAYFKRYQVRFRRRREGKTDYYARKRLVIQDKNKYNTPKYRMIVRVNTRDIIICQIAYARIE
 GDMIVCAAAYAHLPKYGVKVL TNYAAAAYCTGLLLARRLLNRFMDKIYEGQVEVNGGEYNVESIDGQPG
 AFTCYLDAGLARTTTGNKVFGLKGAVDGGLSIPHSTKRFPGYDSEKFNAEVHRKHIMGQNVADYMR
 LMEEDEDAYKKQFSQYIKNNVTPDMMEEMYKKAHAAIRENPVYEKKPKREVKKRWRNPKMSLAQKKDRV
 AQKKASFLRAQERAES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_016980

ORF Size: 894 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_016980.2](#), [NP_058676.1](#)

RefSeq Size: 2036 bp

RefSeq ORF: 894 bp

Locus ID: 100503670

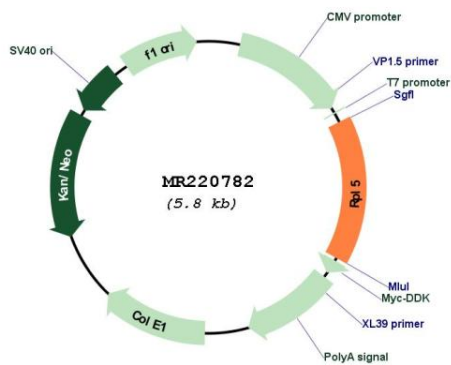
UniProt ID: [P47962](#)

Cytogenetics: 5 52.23 cM

MW: 34.4 kDa

Gene Summary: 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]

Product images:



Circular map for MR220782