

Product datasheet for **MR203024**

Rps3 (NM_012052) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rps3 (NM_012052) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Rps3
Synonyms: D7Erttd795e; Rs_3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR203024 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGCAGATTTCCAAGAAGAGGAAGTTTGTAGCTGATGGCATCTTCAAAGCTGAGCTGAATGAAT
TTCTCACTCGGGAGCTGGCTGAAGATGGCTACTCTGGAGTTGAAGTCCGAGTTACACCAACCAGGACAGA
AATCATTATTTTAGCCACCAGGACACAGAATGTTCTTGGGGAGAAGGGTCGTCGGATCAGAGAGTTGACC
GCAGTTGTCCAGAAGCGCTTTGGCTTCCCTGAAGGCAGCGTAGAGCTTTATGCAGAGAAAAGTGGCCACAA
GAGGTCTGTGTGCCATTGCCAGGCAGAGTCTCTACGCTACAACTCCTTGGAGGGCTTGGGTTTGAAG
GGCCTGCATGGTGTGCTTCGGTTCATTATGGAGAGTGGGGCCAAGGGCTGCGAGGTTGTGGTGTCTGGG
AAGCTCCGAGGACAGAGGGCCAAGTCCATGAAGTTTGTGGATGGTCTGATGATTCACAGTGGAGACCCTG
TAACTACTATGTGACACAGCCGTGCGCCATGTGCTCCTCAGACAGGGTGTGCTGGGCATCAAAGTGAA
GATCATGTGCTGCCCTGGGACCCAAGTGGTAAGATTGGTCCCAAGAAGCCTCTGCCTGATCATGTGAGCATC
GTGGAACCTAAAGATGAAATCCTGCCACGACCCCATCTCCGAACAGAAGGGTGGGAAGCCAGAGCCAC
CAGCCATGCCCCAGCCAGTGCCTACAGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR203024 protein sequence
Red=Cloning site Green=Tags(s)

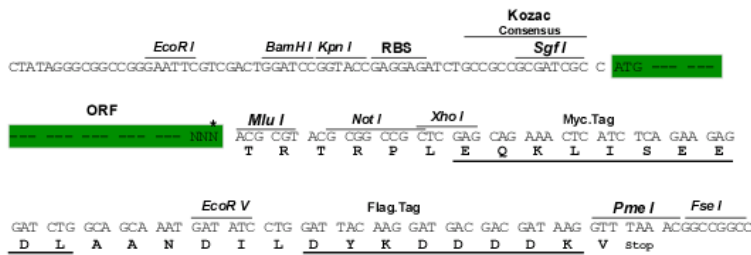
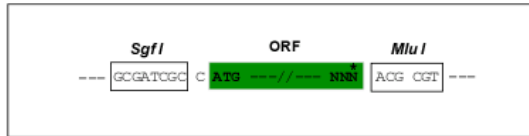
MAVQISKKRKFVADGIFKAELNEFLTRELAEDGYSGVEVRVTPTRTEIIILATRTQNLGEKGRRIRELT
 AVVQKRFGFPEGSVELYAEKVATRGLCAIAQAESLRYKLLGGLAVRRACYGLVRFIMESGAKGCEVVVSG
 KLRGQRAKSMKFVDGLMIHSGDPVNYVYDVAVRHVLLRQGVLGIKVKIMLPWDPSGKIGPKKPLPDHVS
 IVEPKDEILPTTPISEQKGGKPEPPAMPQPVPTA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_012052

ORF Size: 732 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_012052.1](#)

RefSeq Size: 1879 bp

RefSeq ORF: 732 bp

Locus ID: 27050

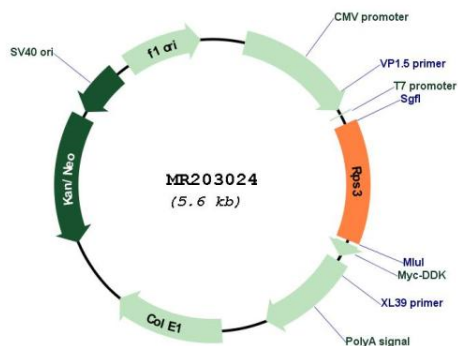
UniProt ID: [P62908](#)

Cytogenetics: 7 54.07 cM

MW: 26.7 kDa

Gene Summary: Involved in translation as a component of the 40S small ribosomal subunit (By similarity). Has endonuclease activity and plays a role in repair of damaged DNA (PubMed:7775413). Cleaves phosphodiester bonds of DNAs containing altered bases with broad specificity and cleaves supercoiled DNA more efficiently than relaxed DNA (By similarity). Displays high binding affinity for 7,8-dihydro-8-oxoguanine (8-oxoG), a common DNA lesion caused by reactive oxygen species (ROS) (By similarity). Has also been shown to bind with similar affinity to intact and damaged DNA (By similarity). Stimulates the N-glycosylase activity of the base excision protein OGG1 (By similarity). Enhances the uracil excision activity of UNG1 (By similarity). Also stimulates the cleavage of the phosphodiester backbone by APEX1 (By similarity). When located in the mitochondrion, reduces cellular ROS levels and mitochondrial DNA damage (By similarity). Has also been shown to negatively regulate DNA repair in cells exposed to hydrogen peroxide (By similarity). Plays a role in regulating transcription as part of the NF-kappa-B p65-p50 complex where it binds to the RELA/p65 subunit, enhances binding of the complex to DNA and promotes transcription of target genes (By similarity). Represses its own translation by binding to its cognate mRNA (By similarity). Binds to and protects TP53/p53 from MDM2-mediated ubiquitination (By similarity). Involved in spindle formation and chromosome movement during mitosis by regulating microtubule polymerization (By similarity). Involved in induction of apoptosis through its role in activation of CASP8 (PubMed:14988002). Induces neuronal apoptosis by interacting with the E2F1 transcription factor and acting synergistically with it to up-regulate pro-apoptotic proteins BCL2L11/BIM and HRK/Dp5 (By similarity). Interacts with TRADD following exposure to UV radiation and induces apoptosis by caspase-dependent JNK activation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR203024