

## Product datasheet for MR204181

### Rnls (NM\_001167818) Mouse Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Rnls (NM_001167818) Mouse Tagged ORF Clone                                     |
| Tag:                      | Myc-DDK  |
| Symbol:                   | Rnls   |
| Synonyms:                 | 6530404N21Rik; AI452315; AW060440; C10orf59                                    |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-Entry (PS100001)   |
| E. coli Selection:        | Kanamycin (25 ug/mL)   |
| ORF Nucleotide Sequence:  | >MR204181 representing NM_001167818<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATTACTGCCAGCAGTCCTCATAATCCCGATGCACAGCTGACTTGGGAGCTCAGTACATCACCTGCT  
CTCCTCATTATGTCAAAGAGCACAAAATTTTTATGAGGAAGTGTAGCTCATGGAATTTGAAGCCTCT  
GACATCCCCCATTGAAGGAATGAAAGGGAAGGAGGAGATTGCAACTTTGTGGCACCTCAAGGATTTTCT  
TCAGTTATCAAGTACTACTTAAAAAGTCAGGTGCAGAAGTCTCCCTCAAGCACTGTGTGACTCAGATCC  
ACCTGAAAGATAACAAGTGGGAAGTCTCCACAGACTGGCTCTGCTGAGCAGTTTGACCTGTGCATCCT  
CACCATGCCAGCTCCTCAGATTCTGGAAGTCAAGGTGACATTGTGAAGTAAATTAGTGAACGCCAGAGG  
GAGCAACTGAAATCTGTGAGTACTCCTCTCGCTATGCTCTGGCCTCTTTTATGAAGTAGGCATGAAGA  
TTGGTGTCCCTTGGTCTGCCGCTACCTCAGCAGTCACCCCTGCATATGCTTCATCTCCATTGATAATAA  
GAAGCGCAATATAGATCATCAGAATGTGGTCCATCCGTGGTATCCAAACCACTGTCCCATTGGAGTT  
CAACACTTGGAGGCCAGTGAGCGGATGTGCAGAAGTTAATGATCCAGCAATTGGAACCACTTCTGCCGG  
GTTTGCCTCAGCCAGTTGCTACCATATGCCATAAATGGACATATTCACAGGTTACAAGCTCAGTTCCGA  
CAGACCTGGTCAGATGACTCTTCATCTCAAGCCTTCTGGTGTGCGGAGGGGATGGATTACTCACTCC  
AACTTCAATGGCTGCATCTCCTGCCCCGAGTGCATGAAAGTTTTAAAGCGTTATATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR204181 representing NM\_001167818  
 Red=Cloning site Green=Tags(s)

MITASSPHNPRCTADLGAQYITCSPHYVKEHQNFYEELLAHGILKPLTSPIEGMKGEGDCNFVAPQGFS  
 SVIKYYLKKSGAEVSLKHCVTQIHLKDNKWEVSTDTGSAEQFDLVILTMPAPQILELQGDIVNLI SERQR  
 EQLKSVSYSSRYALGLFYEVMKIGVWPSCRYSHPICIFISIDNKKRNIESSECGPSVVIQTTVPFGV  
 QHLEASEADVQKLMIQQLLETILPGLPQPVATICHKWTYSQVTSVSDRPGQMTLHLKPFLLVCGGDGFTHS  
 NFNGCISSALSVMKVLKRYI

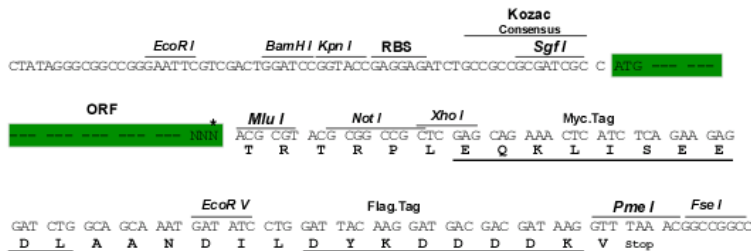
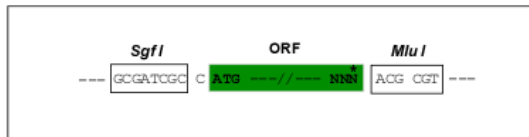
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9059\\_h10.zip](https://cdn.origene.com/chromatograms/mm9059_h10.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\_001167818

**ORF Size:** 900 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\\_001167818.1](#), [NP\\_001161290.1](#)

**RefSeq Size:** 1632 bp

**RefSeq ORF:** 903 bp

**Locus ID:** 67795

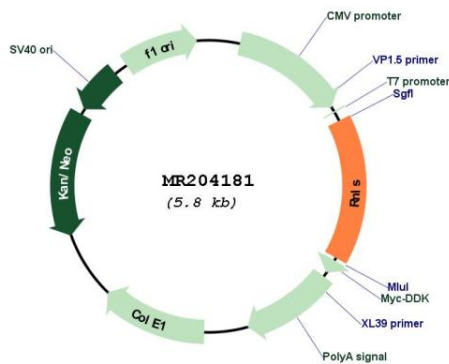
**UniProt ID:** [A7RDN6](#)

**Cytogenetics:** 19 C1

**MW:** 33.3 kDa

**Gene Summary:** Catalyzes the oxidation of the less abundant 1,2-dihydro-beta-NAD(P) and 1,6-dihydro-beta-NAD(P) to form beta-NAD(P)(+). The enzyme hormone is secreted by the kidney, and circulates in blood and modulates cardiac function and systemic blood pressure. Lowers blood pressure in vivo by decreasing cardiac contractility and heart rate and preventing a compensatory increase in peripheral vascular tone, suggesting a causal link to the increased plasma catecholamine and heightened cardiovascular risk. High concentrations of catecholamines activate plasma renalase and promotes its secretion and synthesis. [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR204181