

## Product datasheet for **RR200952**

### Per1 (NM\_001034125) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Per1 (NM\_001034125) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Per1  
**Synonyms:** rper1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR200952 representing NM\_001034125  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGGATCGCC

ATGAGCGTCCCCTAGAAGGGGCTGATGGGGGAGGAGACCCAGGCCCGGAGAACCTTTTTGTCTGGAG  
GAGTTCATCCCCTGGGCCCCACAGCATCGGCCCTTGCCAGGCCCTAGCCTGGCTGATGACTGATGC  
AAACAGCAATGGCTCAAGTGGCAATGAATCCAATGGACACGAGTCCAGGGGTGCATCTCAGCGGAGTTCT  
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CAACCCGTCTACCAAGTGGCTGCAGCAGTGAACAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT  
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CACTCCAGTATGCTCTGGCTGTGTCAAGCAGGTGCAGGTAACCCAGGAATATTACCAGCAGTGGAGCCT  
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CCTAGCTCCCCAGGATGTGGGTGCTTCTATGGCTCTACTACCATCTCGCCTGCCACCTGGGGCACT  
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CCCCGATTCTCTGACAAGAGGATCTTACCACACGGCACACACCAAGTTGCCTCTCCAGGATGTAG  
ATGAAAGGGTGCCTGCTGGGTTACCTACCCAGGATCTCCTGGGGCTCCGGTACTTCTCTTTCT  
ACATCCTGAGGACCGACCTCTCATGCTGGCCATTATAAGAAGATTCTGCAGTTGGCAGGCCAGCCCTTT  
GACCACTCCCCTATTCGATTTTGTGCTCGAATGGGAATATGTCACCATGGATACCAGTGGGCCGGCT  
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TGAGGACGTCTTACACCCCAAGTCCAGTCCAGCTCCGTCCTGGACTCTGATATCCAGGAGCTCTCA  
GAGCAGATCCATCGATTGCTGCTGCAGCCAGTGCACAGCTCCAGCACCACGGGGCTCTGTGGAGTTGGCC



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CTCTGATGTCCCCTGGTCTCTCCACAGCCCTGGCTCCTCCAGTGATAGCAATGGGGTGATGCTGAGGG  
GCCTGGGCTCCTGCTCCAGTGACTTCCAGCAGATCTGTAAGGATGTGCATCTGGTAAAGCACCAGGGA  
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CTTTACCTGCAGAAGAGAATGGCACCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >RR200952 representing NM\_001034125  
 Red=Cloning site Green=Tags(s)

MSGPLEGADGGDPRPGEFPCGGVPSGAPQHRPCPGPSLADDDANSNGSSGNESENGHESRGASQRRS  
 HSSSSGNGKDSALLETTESSKSTNSQSPSPSSSIAYSLLSASSEQDNPSTSGCSSEQSARARTQKELMT  
 ALRELKRLPPERRGKGRSGTLATLQYALACVKQVQANQEYYQQWSLEEGEPCAMDMSTYLEELEHITS  
 EYTLRNQDTFSVAVSFLTGRIVYISEQAGVLLRCKRDVFRGARFSELLAPQDVGVFYGSTTSPRLPTWGT  
 GTSAGSGLKDFDTQEKSVFCRIRGGPDRDPGRYQPFRLTPYVTKIRVSDGAPAQPCELLIAERIHSGYEA  
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 DHSPIRFCARNGEYVMTDSWAGFVHPWSRKVAVFLGRHKVRTAPLNEDVFPPVPSPAPSLDSDIQELS  
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 QQLFIESRAKPPPRLLATGTFKAKVLPQSPNPELEVAPAPDQASLALAPEEPERKESGCSYQQINC  
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 AYRPVGLTKAVLSLHTQKEEQAFLSRFRDLGRLRGLDTSSVAPSAPGCHHGPIPSGRRHHCRAKRSRH  
 HQTPRPETPCYVSHSPVSSGPPWPPATTPFAVVQYPLPVFSPRGGPQPLPPAPTSVSPATFPSPPL  
 VTPMVALVLPNYLFPSPSYPYGVSQAPVEGPPTPASHSPSPSLPPPPSPPHRPSPLFNSRCSPLQL  
 NLLQLEESPRTEGGAAAGGPGSSAGPLPPESEAEPEPRLVEVTESSNQDALSGSSDLELLQLQEDSRSG  
 TGAASGSLGSLGSGSGSGSHEGGSTSASITRSSQSSTSKYFGSIDSSEAEAGAAQARTEPGDQVIKY  
 VLQDPIWLLMANADQHVMMTYQVPSRDAASVLKQDRERLRAMQKQPRFSEDQRRELGAHVSWVRKQLP  
 QALDVTACVDCGSSVQDPGHSDPLFSELDGLGLEPMEEGGGEGGGVGGGGGGVGGGGGGGEEAQTQIG  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

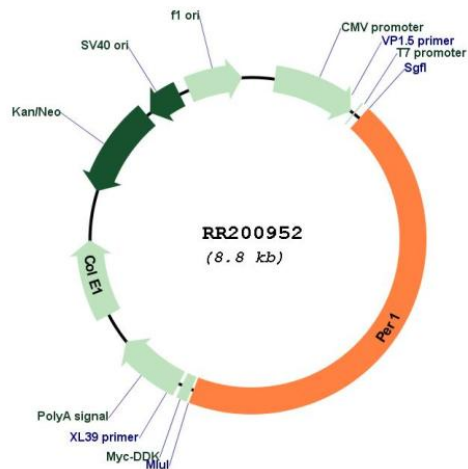
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001034125

ORF Size: 3879 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\\_001034125.1](#), [NP\\_001029297.1](#)

RefSeq Size: 4001 bp

RefSeq ORF: 3882 bp

Locus ID: 287422

UniProt ID: [Q8CHI5](#)

Cytogenetics: 10q24

**MW:** 136.2 kDa

**Gene Summary:** This gene is a member of the Period family of genes and is expressed in a circadian pattern in the suprachiasmatic nucleus, the primary circadian pacemaker in the mammalian brain. Genes in this family encode components of the circadian rhythms of locomotor activity, metabolism, and behavior. This gene is upregulated by Clock/Arntl heterodimers but then represses this upregulation in a feedback loop using Per/Cry heterodimers to interact with Clock/Arntl. Polymorphisms in this gene may increase the risk of getting certain cancers. [provided by RefSeq, Jan 2014]