

## Product datasheet for MC229380

### Per3 (NM\_001289877) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Per3 (NM\_001289877) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Per3  
**Synonyms:** 2810049O06Rik; mPer3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC229380 representing NM\_001289877  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGATCCCTGTGGAGACCCGGCAGTACCTGGTGGCGACTGTCCCAGACTAGGGGACCGGGCTCCAGG  
 GGGCGTCTGGCCAGGAGGTCTCTGCAGGCACTTTCGCTGGACAGCAGCCACAGTGAACACGAAGACCG  
 AAACAGAAATGTCTGAAGAGCTTATAATGGTTGTCCAAGAAATGAAAAAGTATTTCCAGCCGAGAGGCAC  
 ACTAAGCCAGTACCCTAGATGCTTAACTATGCCCTGCGCTGTGTACACAGTGTGCAAGCAAACAGTG  
 ACTTTTTCCAGAGTCTCGGTCCACGCGGAGCACACCAGGCAGATGTGACTGTATACAGTCTTGAGGACCT  
 CACCGCTCTGGCTTCTGAACATACTTCTAAGAACACAGATACCTTCGCGGCCGTGTTTTCGTTTTCTGTCT  
 GGAAGGTTAGTGACATTTCTGAGCAGGCTGCTTTGATCCTGAATTCTAAGAGGGGTTTTCTCAAGAGCG  
 TGCACTTTGTGACCTGCTTGCCCTCAAGACGTGAGGGCGTTCTACGCGCACACTGCTCCAACCTCAGCT  
 TCCTTTCTGGAACAACTGGACCCAAAGAGCCTCGCAGTATGAATGTGCACCAGCGAAACCCTTTTCTGC  
 AGAATCTGTGGAGGTGGAGACAGAGAGAAGAGGCATTACTCCCATTCCGGATCCTCCCCTATTTGGTTC  
 ATGTACATAGCTCTGCCAGCCAGAACCAGAGCCTTGTGTCTAACACTGGTTGAAAAGATTCACTCTGG  
 TTACGAAGCTCCTCGAATCCCTGTAGATAAAAAGATTTTTACCACAACACACACTCCAGGATGTGTGTTT  
 CTTGAAGTAGATGAAAGAGCAGTGCCTTTGCTGGGTTACCTACCTCAGGATCTGATTGGAACATCGATCT  
 TAACATACTTGCACCCAGAAGATCGGCCTCTGATGGTTGCCATACACCAAAAAGTTTTAAAGTATGCCGG  
 CCACCCTCCGTTTGAACACTCGCCCGTCAGATTCTGCACTCAGAACGGAGAGTATGTCACTTCTGGATTCC  
 AGCTGGTCCAGCTTTGTCAACCCTGGAGCCGGAAGGTCTCCTTCATCATTGGTCGACATAAAGTCCGAA  
 CGAGTCCATTAATGAAGATGTTTTGCCACCAGAATAAAAAAGGCAGCCAGTACGACAAAAGACATAGC  
 AGAATTACAAGAACAATTCACAACTTCTCTTGACCCGTTTCATGCTAGTGCTCCAGTGCTACGGG  
 AGCCTGGGCAGCAGCGGCTCACAGGAGCAGCACGTGAGCATCACCTCTTCGAGTGAGTCCAGCGGGCACT  
 GTCCGGAGGAAGCCAGCATGAGCAGATGACCCTGCAGCAGGTCTATGCCAGTGTAAACAAAATTAAAGAA  
 TGTGGGCCAACAGCTCTACATCGAGTCCATGGCCAGATCATCAGTGAAGCCAGTGGCAGAGACGTGCGTG  
 GAACCGCAGGGTGGTGTGATGAGCAGAAGGACTTTTCTTCTCTCAGACACTGAAAAATAAAGCACCACCG



[View online »](#)

ATACTGGCTCCGGTGGCAATCTGCAGCAAGAGCAGCCAGCTCGTCTATCAGCAGATGAACTGTATCGA  
 CAGTGTATCAGGTACCTGACAAGCTACAGCCTCCCGGCCTTGAAAAGAAAGTGCATCTCCTGCACAAAC  
 ACATCTTCATCCTCAGAAGAAGCAAGCCAATCCCGGAGGTGGACAGCAGCCAGAGACACGGAACAGC  
 TCCTGGACATACGGAAACAGGAAACAATGGACCATCCACAGACATCGAAGGAGGTGCTGCTCGGACCCT  
 GTCCACCGCCGCACTGAGCGTGGCGTCTGGCATCAGCCAGTGCAGCTGCAGCAGCACCTCTGGCCACGCT  
 CCGCCCCACAGTCAGCAGAAAGTGTGGCGTGGCGTGTAAAGCCGTGGGCCCTGAGAACAAGGCCCTCTC  
 ACCTGGCTGCAGGAGATTTAAGCACGTGGGGCTCACAGCAGTGTCTCTCTGCACACACACAGAAGGA  
 AGAGCAGAACTACGTTGACAGGTTCCGGGAAAAGATCCTGACCTCGCCCTACGGTTGCTATCTTCAGCAA  
 GAGAGCAGAAACCGTGCTCAGTACTCTGTGTTCAAGCAGGGTCCACTGCTAAGCACAGCAGATGTGCTG  
 GAAGCGAGAGGCAGAAGCACAACGAAAGAAGTTGCCAGCACCTGTGGACACCAGCAGCCCCGGTGCCCA  
 CCTCTGTCCCATGTACAGGACTCCTCCCGATGAGCAGCACTGGGGCCATCCGCTAGCCCCCTCCCC  
 CTCGGCGCAGGCTTAGCATTCCCTCGGCCCTGGTAGTCCCAGCCAGACCCCTTATCTCTCCCCTTT  
 TTCCCCTCAAGATATGGCTCTCAGGGAGTGGGGTCTCGGCAGCTGGGGAGCTGCAGCCGATGTCC  
 ACCTCTGTCCGCCGCCAGGCTGTTGCCGCTTCCCCTCCGCTTACGTGGATACTTTGATGACCATC  
 TTCTGCACAACGCCCTCTTCCCTCTGTGGCCGCCCTCGTTCTCCCATAACCATCCCTGGGGGCCG  
 CAGGGTCTTCTGAAGTGGCACCCTTAGTACCAGCAATGGCTCAAACCCGGAACCAACCACTTCAGGCCA  
 CAGCCAAAGGAGAGTGGAGGAGAACTGGGAGGCACACAGTGAAGAGCTTCCGTTCACTAGCTCACGGAGC  
 AGTTACCCGTTACAGTTAAATTTACTCCAGGAAGAAATGCCTGCGCCGTGAGTCCGCAGACGAGTGA  
 GAAGAGGCGCTGGCCAGACGCTAAGCATCACTGTGTTACAGGTCCCAGTGGCAGTAGGAGCCGTCAGT  
 CACCTCTGGTGAAGTGGCCACGGCAACAGCGCAGCAGGAGTCTGCTGCTGCCTCAGGAAGCAGTGCAGC  
 AGTATACTTTCAGTAGCACTGACTATGCTTCTGAAGTCTTGAAAACAGACAGAGGCCACAGGATAGAC  
 AGAGAGCAAGCCCTTCCCGGGCGGCTGAAGAGTCCATCTGGAGAATGATAGAGCGGACACCAGAGTG  
 TGTTCTCATGACATACCAGGTGCCCGAGAGGGTTCGAGAGGAGGTGCTGAAGCAGGACTGGAGAAGTC  
 CAGAGCATGGAACAGCAGCAGCCCTGTTCTCTCCCGCGCAGAGGAGGAGCTGGCCAAGGTGCGCTCCT  
 GGATCCACAGCCACAGCCCTCAGGAGGACACCTCCAGAGCTGTGTCGCTGTGAAGACAGAGGTTCT  
 AGTGGGTGACACTGCAGAGGTCTGGAACAGCACCCAGCAGAAGACACCAGTTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001289877
- Insert Size:** 3345 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_001289877.1](#), [NP\\_001276806.1](#)

**RefSeq Size:** 5999 bp

**RefSeq ORF:** 3345 bp

**Locus ID:** 18628

**Cytogenetics:** 4 E2

**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 have been linked to sleep disorders. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2014]

Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.