

Product datasheet for MR231591

Per3 (NM_001289877) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Per3 (NM_001289877) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Per3
Synonyms: 2810049O06Rik; mPer3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR231591 representing NM_001289877
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGATCCCTGTGGAGACCCGGCAGTACCTGGTGGCGACTGTCCCAGACTAGGGGACCGGGCTCCAGG
 GGGCGTCTGGCCAGGAGGTCTCTGCAGGCACTTTCGCTGGACAGCAGCCACAGTGAACACGAAGACCG
 AAACAGAAATGTCTGAAGAGCTTATAATGGTTGTCCAAGAAATGAAAAAGTATTTCCAGCCGAGAGGCAC
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 ACTTTTTCCAGAGTCTCGGTCCACGCGGAGCACACCAGGCAGATGTGACTGTATACAGTCTTGAGGACCT
 CACCGCTCTGGCTTCTGAACATACTTCTAAGAACACAGATACCTTCGCGGCCGTGTTTTCTGTTTCTGTCT
 GGAAGGTTAGTGACATTTCTGAGCAGGCTGCTTTGATCCTGAATTCTAAGAGGGGTTTTCTCAAGAGCG
 TGCACTTTGTGACCTGCTTGCCCTCAAGACGTGAGGGCGTTCTACGCGCACACTGCTCCAACCTCAGCT
 TCCTTTCTGGAACAACCTGGACCCAAAGAGCCTCGCAGTATGAATGTGCACCAGCGAAACCCTTTTCTGC
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 TTACGAAGCTCCTCGAATCCCTGTAGATAAAAGAATTTTTACCACAACACACACTCCAGGATGTGTGTTT
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 CCACCCTCCGTTTGAACACTCGCCCGTCAGATTCTGCACTCAGAACGGAGAGTATGTCACTTCTGGATTCC
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 GAACCGCAGGGTGGTGTGATGAGCAGAAGGACTTTTCTTCTCTCAGACACTGAAAAATAAAGCACCACCG



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ATACTGGCTCCGGTGGCAATCTGCAGCAAGAGCAGCCAGCTCGTCTATCAGCAGATGAACTGTATCGA
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 GAAGAGGCGTGGCCAGACGCTAAGCATCACTGTGTTACAGGTCCCAGTGGCAGTAGGAGCCGTCACTG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence:

>MR231591 representing NM_001289877
 Red=Cloning site Green=Tags(s)

MDPCGDPVAVPGGDCPQTRGPGLQGASGQEGPLQGTQVDSHSEHEDRNRMSEELIMVVQEMKYPFAERH
 TKPSTLDALNYALRCVHSVQANSDFQSLGPRGAHQADTVVYSLLEDLTALASEHTSKNTDTFAAVFSFLS
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 RICGGGDREKRHYSFPRILPYLVHVHSSAQPEPEPCCLTLVEKIHSGYEAPRIPVDKRIFTTHTHPGCVF
 LEVDERAVPLLGYLPQDLIGTSILTYLHPEDRPLMVAIHQKVLKYAGHPPFEHSPVRFCTQNGEYVILDS
 SWSSFVNPWSRKVSFIIIGRHKVRTSPLNEDVFATRICKAASNDKDIAELQEIQHKLQLPVPHASASSGYG
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 EPQGGDEQKDFSSQTLKNKSTTDTGSGGNLQQEQPSSSYQMMNCIDSVIRYLTYSYLPALKRKCISCTN
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 PPLQSAESVAVACKPWALRTKASHLAAGGFKHVGLTAAVL SAHTQKEEQNYVDRFREKIL TSPYGCYLQQ
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 LGAGLAFPSALVVPSTPYLLPSFPLQDMASQGVGSAAWGAAAGCPPLSAGPQAVAAFPASAYVDTLMTI
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 SSPLQLNLLQEEMPAPSEADAVRRGAGPDAKHHCVTGPSGSRHCTSGELATAAQESAASAGSSAS
 SIYFSSTDYASEVSENQRQPDRQRDEALPGAEEESIWRMIERTPECVLMTYQVPERGREEVLKQDLEKL
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

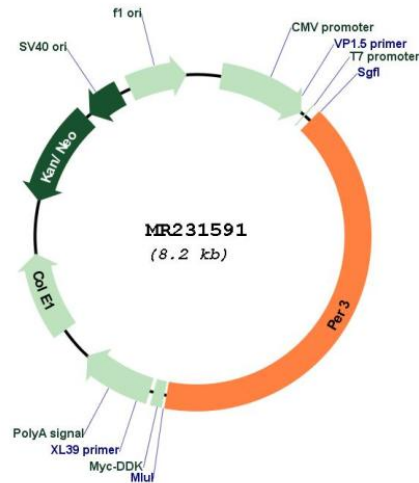
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289877

ORF Size: 3342 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:	<ol style="list-style-type: none">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:	<u>NM_001289877.1, NP_001276806.1</u>
RefSeq Size:	5999 bp
RefSeq ORF:	3345 bp
Locus ID:	18628
Cytogenetics:	4 E2
MW:	121.4 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 have been linked to sleep disorders. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2014]