

Product datasheet for **RC240031**

PER3 (NM_001289863) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PER3 (NM_001289863) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PER3
Synonyms:	FASPS3; GIG13
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC240031 representing NM_001289863 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGCGGGGAAGCTCCTGGCCCCGGGAGACGGGGGGCTAAGGACGAGGCCCTGGGCGAAGAATCGG
GGGAGCGGTGGAGCCCCGAGTTCATCTGCAGAGGAAATTGGCGGACAGCAGCCACAGTGAACAGCAAGA
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CGCAATAAACCAAGCACTCTAGATGCCCTCAACTATGCTCTCCGCTGTGTCCACAGCGTTCAAGCAAACA
GTGAGTTTTTCCAGATTCTCAGTCAGAATGGAGCACCTCAGGCAGATGTGAGCATGTACAGTCTTGAGGA
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AAAACAATAGTGTGTACTGAGCCCTGTGAGGATTTGAGGAACGATGAGCACAGCCATCCTATCAACA
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Protein Sequence: >RC240031 representing NM_001289863
 Red=Cloning site Green=Tags(s)

MPRGEAPGPGRRGAKDEALGEESGERWSPEFHLQRKLADSSHSEQQDRNRVSEELIMVVQEMKKYFPSE
 RNPSTLDALNYALRCVHSVQANSEFFQILSQNGAPQADVSMYSLEELATIASEHTSKNTDTFVAVFSFL
 SGRLVHISEQAALILNRKKDVLASSHFVDLLAPQDMRVFYAHTARAQLPFWNNWTRAAAARYECAPVKPF
 FCRIRGGEDRKQEKCHSPFRIIPYLIHVHHPAQPELESEPCCLTVVEKIHSGYEAPRIPVNRKIFTTTHT
 PGCVFLEVDEKAVPLLLGYPQLDIGTSLSYLHPEDRSLMVAIHQKVLKYAGHPPFEHSPIRFCTQNGDY
 IILDSSWSSSFVNPWSRKISFIIIGRHKVRTSPLNEDVFATKIKKMNNDNDKIDITELQEIQYKLLQPVHVS
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 ISCTNTTSSSSEEDKQNHKADDVQALQAGLQIPAIKSEMPNTNGRSIDTGGGAPQILSTAML SLGSGISQ
 CGYSSTIVHVPPEPTARDATLFCWPWTLNMQPAPLTSEEFKHVGLTAAVLSAHTQKEEQNYVDKFKREKIL
 SSPYSSYLQQESRSKAKYSYFQGDSTSKQTRSAGCRKGGKHKRKKLPEPPDSSSSNTGSGPRRGHQAQAP
 CCPAASSPHTSSPTFPPAAMVPSQAPYLVPAPFLPAATSPGREYAAPGTAPGLHGLPLSEGLQPYPAF
 PFPYLDTFMTVFLPDPVCPPLLSPSFLPCPFLGATASSAISPSMSAMSPTLDPPPSVTSQRREEEKWEA
 QSEGHPIITSRSSPLQLNLLQEEMPRPSESPDQMRNTCPQTEYCVTGNNGSESSPATTGALSTGSPPR
 ENPSHPTASALSTGSPPMKNPSHPTASTLSMGLPPSRTPSHPTATVLSGSPSESPSRTGSAASGSSDS
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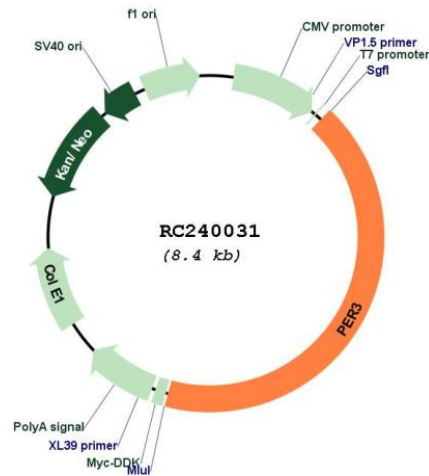
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001289863

ORF Size: 3552 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_001289863.3](#)

RefSeq Size: 6258 bp

RefSeq ORF: 3555 bp

Locus ID: 8863

UniProt ID: [P56645](#)

Cytogenetics: 1p36.23

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Circadian rhythm - mammal

MW: 130.6 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, Jan 2014]