

Product datasheet for **MR225732**

Cry1 (NM_007771) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Cry1 (NM_007771) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Cry1 |
| Synonyms: | AU020726; AU021000; Phl11 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MR225732 representing NM_007771
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGTGAACGCCGTGCACTGGTTCGAAAGGGACTCCGGCTCCACGACAACCCGCCCTGAAGGAGT
 GCATCCAGGGCGCGACACCATCCGCTGCGTCTATATCCTCGACCCTGGTTCGCCGGCTCTTCCAACGT
 GGGCATCAACAGGTGGCGATTTTGTCTCAGTGTCTTGAGGATCTTGATGCCAATCTACGAAAATTAAT
 TCTCGTCTGTTGTGATTCGGGGACAGCCAGCTGATGATTTCCAGGCTTTTCAAGGAATGGAACATCA
 CTAAACTCTCAATTGAGTATGATTCTGAGCCTTTTGGGAAGAACGAGATGCAGCTATCAAGAAGCTGGC
 TACTGAGGCTGGCGTGGAAAGTATCGTGCATTTTACATACACTGTATGACCTGGACAAGATCATAGAA
 CTAATGGCGGACAGCCACCTAACATATAAAAGTTTTCAGACTCTCGTCAGCAAGATGGAGCCACTGG
 AGATGCCAGCAGACACCATCACATCAGATGTGATAGGAAAGTGCATGACCCCTCTGTCTGATGACCATGA
 TGAAAAATATGGCGTTCCTTCCCTGGAAGAGCTCGGCTTTGATACAGATGGCCTGCTCTCGAGTGTGG
 CCAGGAGGAGAACTGAGGCACTTACACGTTTGGAAAGGCATTTGGAAAGAAAGGCTGGGTGGCAAAC
 TTGAACGACCTCGAATGAATGCAAACCTCCTGCTTGAAGCCAACTGGACTCAGTCCTTATCTCCGCTT
 TGGTTGTTATCATGTCCGCTGTTTTATTTCAAACCTAACAGATCTCTACAAAAAGGTAAGAAGAATAGT
 TCCCTCCCTTTCTCTTATGGCAACTCCTGTGGCGTGAATTTTTTATACAGCAGCCACAAACAACC
 CACGCTTTGACAAAAAGGAAGGGAACCCCATCTGTGTTGAGTCCCTGGGACAAGAACCCCGAGGCTCT
 GGCCAAATGGGCAGAAGGCCGACAGGCTTCCCGTGGATTGACGCCATCATGACTCAGCTTCGTGAGGAG
 GGCTGGATCCACCATTTAGCCAGACACGCGTTGCCCTGTTTCTGACTCGTGGTACCTGTGGCAAGCT
 GGAAGAAGGGATGAAGGTCTTTGAAGAGTTACTGCTTATGATGCAGATTGGAGCATAAATGTGGAAGT
 GATGTGGCTGCTCAGTTCCTTTTTTTCAGCAATTTTTTCACTGCTACTGCCCTGTGGTTTTGTTAGG
 AGGACAGATCCCAATGGAGACTATATTAGCGTATTACCTGTCTAAGAGGCTTCCCTGCAAAATATA
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 CAAACCGATGGTGAACCATGCTGAGGCAAGCAGACTGAATATTGAAAGAATGAAGCAGATCTATCAGCAG
 CTTTCCCGGTACAGAGGGCTAGGTCTTCTCGCCTCGGTCCTTCTAACTAATGGGAATGGAGGGCTCA
 TGGGCTATGCTCCTGGAGAGAATGTCGAGTGTAGCAGCAGCGGAATGGAGGGCTCATGGGCTATGC
 TCCTGGAGAGAACGTCGAGCTGTAGCGGTGAAATTTGCTCTCAAGGAAGTGGTATTTTACTATGCT
 CACGGGGACAGTCAGCAGACTCACTCAAGCAAGGGAAGCTCCGCGGGCACCGGCTCAGCAGT
 GGAAGCGTCTAGTCAGGAAGAGGATGCCAGAGTGTGCGCCCAAGTCCAGCGGCAGAGCAGTAAC

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR225732 representing NM_007771
 Red=Cloning site Green=Tags(s)

MGVNAVHWFRKGLRLHDNPALKECIQGADTIRCYVYILDWPFAGSSNVGINRWRFLQCLELDANLRKLN
 SRLFVIRGQPADVFPRLFKEWNIKLSIEYDSEPFGKERDAAIKKLATEAGVEVIVRISHTLYDLDKIIE
 LGGQPPITYKRFQTLVSKMEPLEMPADTITSDVIGKMTPLSDDHDEKYGVPSLEELGFDTDGLSSAVW
 PGGETEALTRLERHLERKAWVANFERPRMNANLLASPTGLSPYLRFGLSCRLFYFKLTDLYKKVKKNS
 SPPLSLYGQLLWREFFYTAATNNPRFDKMEGNPICVQIPWDKNPEALAKWAEGRGTFPWIDAIMTQLRQE
 GWIHHLARHAVACFLTRGDLSWEEGMKVFELLLDADWSINAGSMMWLSGSSFFQFFHCYCPVGFGR
 RTDPNGDYIRRYLPVLRGFPKAYIYDPWNAPEGIQKVAKCLIGVNYPKPMVNHAEASRLNIERMKQIYQQ
 LSRYRGLGLLASVPSNSNGGLMGYAPGENVPSGSSNGGLMGYAPGENVPSGSGNCSQSGSILHYA
 HGDSQQTHSLKQGRSSAGTGLSSGKRPSQEEDAQSVGPKVQRSSN

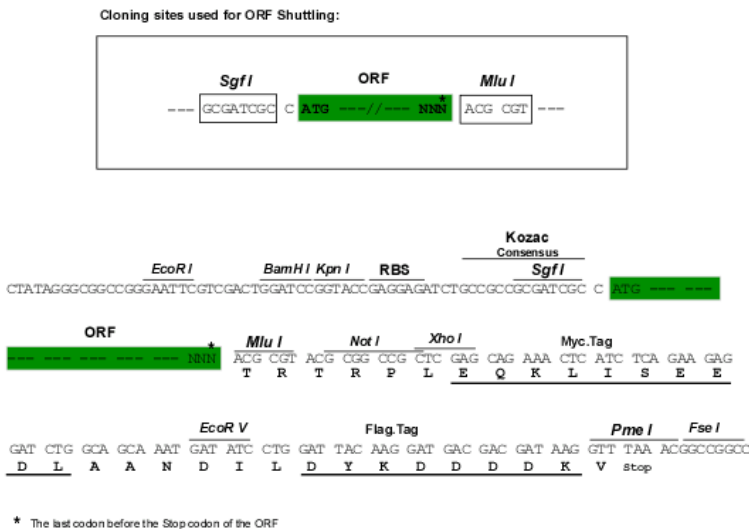
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9036_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007771

ORF Size: 1818 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_007771.3](#), [NP_031797.1](#)

RefSeq Size: 3035 bp

RefSeq ORF: 1821 bp

Locus ID: 12952

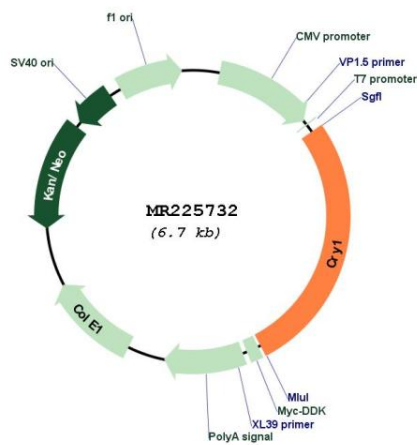
UniProt ID: [P97784](#)

Cytogenetics: 10 41.63 cM

MW: 68.5 kDa

Gene Summary: This gene encodes a flavin adenine dinucleotide-binding protein that is a key component of the circadian core oscillator complex, which regulates the circadian clock. 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 associated with altered sleep patterns. The encoded protein is widely conserved across plants and animals. Loss of this gene results in a shortened circadian cycle in complete darkness. [provided by RefSeq, Feb 2014]

Product images:



Circular map for MR225732