

## Product datasheet for **MG226866**

### **Cry2 (NM\_009963) Mouse Tagged ORF Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                     |
| Product Name:             | Cry2 (NM_009963) Mouse Tagged ORF Clone |
| Tag:                      | TurboGFP                                |
| Symbol:                   | Cry2                                    |
| Synonyms:                 | AV006279; D130054K12Rik                 |
| Mammalian Cell Selection: | Neomycin                                |
| Vector:                   | pCMV6-AC-GFP (PS100010)                 |
| E. coli Selection:        | Ampicillin (100 ug/mL)                  |



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**ORF Nucleotide Sequence:**

>MG226866 representing NM\_009963  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGCGGCTGCTGTGGTGGCAGCGACGGTCCCCGCGCAATCGATGGGCGCGGACGGCGCGTCTCTCGG  
 TGCACTGGTTCGCAAAGGACTACGGCTCCACGACAACCCGCGCTGCTAGCTGCCGTGCGCGGGGCGCG  
 CTGTGTGCGCTGCGTCTACATCCTCGACCCGTGGTTCGCGGCTCCTCGTCTGTGGGCATCAACCGATGG  
 AGGTTCTACTGCAATCTCTGGAAGATCTGGACACAAGCTTAAGAAAGCTGAATTCGCGTCTGTTTGTAG  
 TCCGGGGACAGCCAGCTGATGTGTTCCCAAGGCTGTTCAAGGAATGGGGGTGACCCGTTTGACCTTTGA  
 ATATGACTCTGAACCTTTGGGAAAGAACGGGATGCAGCCATTATGAAGATGGCCAAGGAGGCTGGCGTG  
 GAGGTGGTACTGAGAACTCTCACACCCTATGACCTAGACAGAATCATCGAAGTGAATGGGCAGAAAC  
 CACCCCTTACCTACAAGCGCTTTCAGGCCCTCATCAGCCGATGGAGCTGCCAAGAAGCCCGGGTGGC  
 TGTGAGCAGCCAGCAGATGGAGAGCTGCAGAGCTGAGATCCAGGAGAACCATGACGACACCTATGGCGTG  
 CCTTCCCTGGAGGAGCTGGGATTCACCCAGGAAGGACTTGGCCAGCTGTTTGGCAAGGAGGAGAGACAG  
 AAGCTCTGGCCCGCTGGACAAGCACTTGAACCGGAAGGCTGGGTTGCCAACTATGAGAGACCTCGGAT  
 GAATGCCAATTCCTACTGGCCAGCCCCACAGGCTCAGCCCTACCTGCGCTTTGGATGCCTCTCTCTGC  
 CGCCTCTTCTACTACCGCTGTGGGACTTGTACAAGAAGTGAAGAGGAACAGCACACCCCCCTCTCTCT  
 TATTTGGACAACCTCTGTGGCGAGAATCTTCTACACAGCGGCCACCAACAACCCAGGTTTGACCGAAT  
 GGAGGGGAACCCATCTGCATCCAGATCCCCTGGGACCGCAACCCGAAGCCCTGGCCAAGTGGGCGGAG  
 GGCAAGACAGGCTTCCCTGGATTGACGCCATCATGACCAACTGAGGCAGGAGGGCTGGATCCACCACC  
 TGGCCCGGACGCTGTGGCTGCTTCTCACCCGCGGGACCTCTGGGTGAGTGGGAGAGCGGGTCCG  
 GGTATTTGACGAGCTGCTCTGGATTCGCGATTTTCAAGTGTGAATGCAGGCAGCTGGATGTGGCTGTCTGC  
 AGTGCTTTCTTCCAACAATTCTTCCACTGCTACTGCCCTGTGGGCTTCGCGCCGACGTACAGACCCCAAGT  
 GGGACTACATCCGGCGGTACCTGCCAACTGAAAGGCTTCCCCTCTCGATACATCTATGAGCCCTGGAA  
 TGCCCCGAGTCAAGTTCAGAAGGCTGCCAAGTGCATCATTGGCGTGGACTACCCACGGCCCATCGTCAAT  
 CATGCAGAGACTAGTCGGCTCAACATTGAACGAATGAAGCAGATCTACCAACAGCTGTGAGATACCGGG  
 GACTCTGTCTATTGGCATCTGTCCCTTCTGTGTGAAGACCTCAGTACCCTGTGGCAGAGCCTGGTTC  
 AAGCCAAGCTGGGAGCATCAGCAACACAGGCCCCAGAGCACTATCCAGTGGCCAGCTTCCCCAAACGC  
 AAGCTGGAAGCAGCCGAGGAACCTCTGGTGAAGAACTGACCAAGCGGGCTAGAGTGACGGAGATGCCTA  
 CCAAGAGCCAGCAAGCAAGGACTCC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG226866 representing NM\_009963  
 Red=Cloning site Green=Tags(s)

MAAAVVAATVPAQSMGADGASSVHWFRKGLRLHDNPALLAAVRGARCVRVYIILDPWFAASSVGINRW  
 RFLLQSLLEDLDTSLRKLNSRLFVVRGQPADVFPRLFKEWGVTRLTFEYDSEPFGKERDAAIMKMAKEAGV  
 EVVTENSHLYDLDRIIELNGQKPLTYKRFQALISRMELPKKPAVAVSSQQMESCRAEIQENHDDTYGV  
 PSLEELGFPTGLGPAVWQGGETEALARDKHLERKAWVANYERPRMNANSLASPTGLSPYLRFGCLSC  
 RLFYYRLWDLKVKRNSTPPLSLFGQLLWREFFYTAATNPNRPFDRMEGNPICIQIPWDRNPEALAKWAE  
 GKTGFPWIDAIMTQLRQEGWIHHLARHAVACFLTRGDLWVSWESGVRVFDLLELDFSVNAGSMMWLS  
 SAFFQQFHCYCPVGFGRRTDPSGDYIRRYLPKLGFPSTRYIYEPWNAPEVQKAAKCIIGVDYPRPIVN  
 HAETSRNLNIERMKQIYQQLSRYRGLCLLASVPSCVEDLSHPVAEPGSSQAGSISNTGPRALSSGPASP  
 KLEAAEPPGEELTKRARVTEMPTQEPASKDS

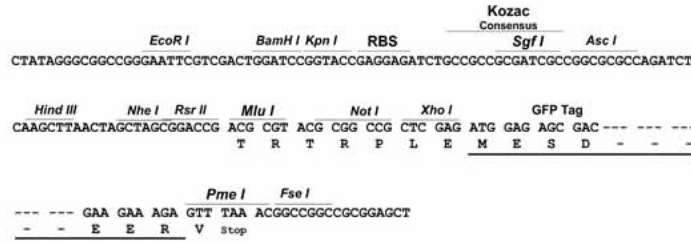
**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

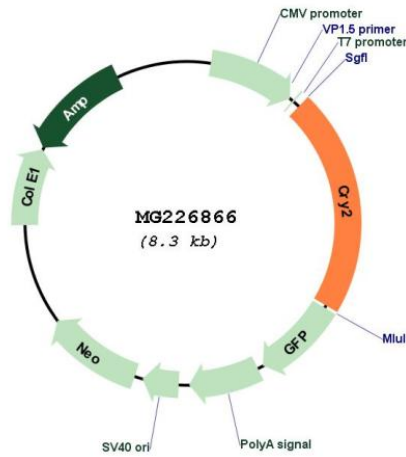
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_009963

ORF Size: 1776 bp

|                               |   |
|-------------------------------|---|
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>  |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.  |
| <b>Components:</b>            | 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>           |
| <b>RefSeq:</b>                | <a href="#">NM_009963.4</a> , <a href="#">NP_034093.1</a>   |
| <b>RefSeq Size:</b>           | 4019 bp   |
| <b>RefSeq ORF:</b>            | 1779 bp   |
| <b>Locus ID:</b>              | 12953   |
| <b>UniProt ID:</b>            | <a href="#">Q9R194</a>  |
| <b>Cytogenetics:</b>          | 2 E1  |
| <b>Gene Summary:</b>          | 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. [provided by RefSeq, Feb 2014] |