

## Product datasheet for **MR209230**

### **Cry2 (BC066799) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cry2 (BC066799) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cry2
Synonyms:	AV006279; D130054K12Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR209230 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGCGGCTGCTGTGGTGGCAGCGACGGTCCCCGCGCAATCGATGGGCGCGGACGGCGCGTCTCTCGG  
 TGCACTGGTTCGCAAAGGACTACGGCTCCACGACAACCCGCGCTGCTAGCTGCCGTGCGCGGGGCGCG  
 CTGTGTGCGCTGCGTCTACATCCTCGACCCGTGGTTCGCGGCTCCTCGTCTGTGGGCATCAACCGATGG  
 AGGTTCTACTGCAATCTCTGGAAGATCTGGACACAAGCTTAAGAAAGCTGAATTCGCGTCTGTTTGTAG  
 TCCGGGGACAGCCAGCTGATGTGTTCCCAAGGCTGTTCAAGGAATGGGGGTGACCCGTTTGACCTTTGA  
 ATATGACTCTGAACCTTTGGGAAAGAACGGGATGCAGCCATTATGAAGATGGCCAAGGAGGCTGGCGTG  
 GAGGTGGTACTGAGAATCTCACACCCTATGACCTAGACAGAATCATCGAATGAATGGGCAGAAAC  
 CACCCCTTACCTACAAGCGCTTTCAGGCCCTCATCAGCCGATGGAGCTGCCAAGAAGCCCGGGTGGC  
 TGTGAGCAGCCAGCAGATGGAGAGCTGCAGAGCTGAGATCCAGGAGAACCATGACGACACCTATGGCGTG  
 CCTTCCCTGGAGGAGCTGGGATTCACCCAGGAAGGACTTGGCCAGCTGTTTGGCAAGGAGGAGAGACAG  
 AAGCTCTGGCCCGCTGGACAAGCACTTGAACCGGAAGGCTGGGTTGCCAACTATGAGAGACCTCGGAT  
 GAATGCCAATTCCTACTGGCCAGCCCCACAGGCTCAGCCCTACCTGCGCTTTGGATGCCTCTCTCTGC  
 CGCCTCTTCTACTACCGCTGTGGGACTTGTACAAGAAGTGAAGAGGAACAGCACACCCCCCTCTCTCT  
 TATTTGGACAACCTCTGTGGCGAGAATCTTCTACACAGCGGCCACCAACAACCCAGGTTTGACCGAAT  
 GGAGGGGAACCCATCTGCATCCAGATCCCCTGGGACCGCAACCCGAAGCCCTGGCCAAGTGGGCCGAG  
 GGCAAGACAGGCTTCCCTTGATTGACGCCATCATGACCAACTGAGGCAGGAGGGCTGGATCCACCACC  
 TGGCCCGGACGCTGTGGCTGCTTCTCACCCGCGGGACCTCTGGGTGAGTGGGAGCGGGGCTCCG  
 GGATTTGACGAGCTGCTCTGGATCCGATTTTCAAGTGTGAATGCAGGCAGCTGGATGTGGCTGTCCTGC  
 AGTGCTTTCTTCCAACAATTCTTCCACTGCTACTGCCCTGTGGGCTTCGGCCGACGTACAGACCCAGTG  
 GGGACTACATCCGGCGGTACCTGCCAACTGAAAGGCTTCCCCTCTCGATACATCTATGAGCCCTGGAA  
 TGCCCCGAGTCAGTTCAGAAGGCTGCCAAGTGCATCATTGGCGTGGACTACCCACGGCCCATCGTCAAT  
 CATGCAGAGACTAGTCGGCTCAACATTGAACGAATGAAGCAGATCTACCAACAGCTGTCGAGATACCGGG  
 GACTCTGTCTATTGGCATCTGTCCCTTCTGTGTGAAGACCTCAGTCACCCTGTGGCAGAGCCTGGTTC  
 AAGCCAAGCTGGGAGCATCAGCAACACAGGCCCCAGAGCACTATCCAGTGGCCAGCTTCCCCAAACGC  
 AAGCTGGAAGCAGCCGAGGAACCTCTGGTGAAGAAGTACCAAGCGGGCTAGAGTGACGGAGATGCCTA  
 CCAAGAGCCAGCAAGCAAGGACTCC

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR209230 protein sequence  
 Red=Cloning site Green=Tags(s)

MAAAVVAATVPAQSMGADGASSVHFRKGLRLHNDPALLAAVRGARCVRVYILDWPFAASSSVGINRW  
 RFLQLSLEDLDTSLRKLNSRLFVVRGQPADVFPRLFKEWGVTRLTFEYDSEPFGKERDAAIMKMAKEAGV  
 EVVTENSHLYDLDRIIELNGQKPLTYKRFQALISRMELPKKPAVAVSSQOMESCRAEIQENHDDTYGV  
 PSLEELGFPTGLGPAVWQGGTEALARLDKHLERKAWVANYERPRMNANSLASPTGLSPYLRFGCLSC  
 RLFYYRLWDLYKVKRNSTPPLSLFGQLLWREFFYTAATNNPRFDRMEGNPICIQIPWDRNPEALAKWAE  
 GKTGFPPWIDAIMTQLRQEGWIHHLARHAVACFLTRGDLWVSWESGVRVFDLLEDADFVNAGSMMWLS  
 SAFFQQFHCYCPVGFGRRTDPSGDYIRRYLPLKLGFPYRYIYEPWNAPEVQKAAKCIIGVDYPRPIVN  
 HAETSRLNIERMKIYQQLSRYRGLCLLASVPSCVEDLSHPVAEPGSSQAGSISNTGPRALLSSGPASP  
 KLEAAEPPGEELTKRARVTEMPTQEPASKDS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** BC066799

**ORF Size:** 1776 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:** [BC066799.1](#)

**RefSeq Size:** 3970 bp

**RefSeq ORF:** 1778 bp

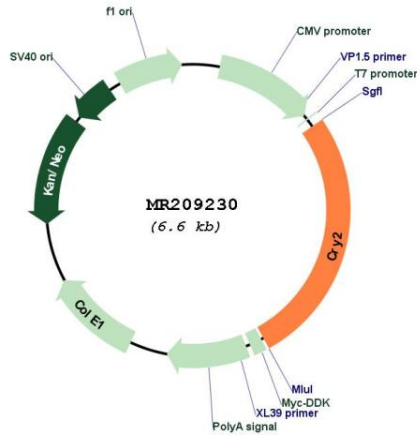
**Locus ID:** 12953

**Cytogenetics:** 2 E1

**MW:** 66.9 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. [provided by RefSeq, Feb 2014]

**Product images:**



Circular map for MR209230