

## Product datasheet for **RC225913**

### **CRY2 (NM\_001127457) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CRY2 (NM_001127457) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CRY2
Synonyms:	HCRY2; PHLL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC225913 representing NM\_001127457  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCAGCTCCACCCGGGCGGACCCACACATGGTTCTACTTCAGTCTCTGGAAGATTTGGACACAAGTT  
 TAAGGAAACTGAACTCCCGCCTGTTTGTAGTCCGGGGACAGCCAGCCAGGTGTTCCCAAGGCTGTTCAA  
 GGAATGGGGAGTGACCCGCTTGACCTTTGAATATGACTCTGAACCCCTTTGGGAAAGAACGGGATGCAGCC  
 ATCATGAAGATGGCCAAGGAGGCTGGTGTGGAAGTAGTGACGGAGAATTCTCATACCCTCTATGACCTGG  
 ACAGGATCATTGAGCTGAATGGGCAGAAGCCACCCCTTACATAACAAGCGCTTTCAGGCCATCATCAGCCG  
 CATGGAGCTGCCAAGAAGCCAGTGGGCTTGGTGACCAGCCAGCAGATGGAGAGCTGCAGGGCCGAGATC  
 CAGGAGAACCACGACGAGACCTACGGCGTGCCCTCCCTGGAGGAGCTGGGGTTCCCCACTGAAGGACTTG  
 GTCAGCTGTCTGGCAGGGAGGAGACAGAAGCTCTGGCCCGCCTGGATAAGCACTTGGAAACGGAAGGC  
 CTGGGTTGCCAACTATGAGAGACCCGAATGAACGCCAACTCCCTCTGGCCAGCCACAGGCCTCAGC  
 CCCTACCTGCGCTTTGGTTGTCTCTCTGCCGCTCTTCTACTACCGCTGTGGGACCTGTATAAAAAGG  
 TGAAGCGGAACAGCACACCTCCCTCTCCCTATTTGGGCAACTCTATGGCGAGAGTTTCTCTACACGGC  
 AGCTACCAACAACCCAGGTTTGACCGCATGGAGGGGAACCCATCTGCATCCAGATCCCTGGGACCCG  
 AATCCTGAGGCCCTGGCCAAGTGGGCTGAGGGCAAGACAGGCTTCCCTTGGATTGATGCCATCATGACCC  
 AACTGAGGCAGGAGGGCTGGATCCACCCTGGCCCGCATGCCGTGGCTGCTTCTGACCCGCGGGGA  
 CCTCTGGGTCAGCTGGGAGAGCGGGTCCGGTATTTGATGAGCTGCTCCTGGATGCAGATTTACAGCTG  
 AACGCAGGCAGCTGGATGTGGCTGTCTGCAGTGTCTTCTCCAGCAGTCTTCCACTGCTACTGCCCTG  
 TGGGCTTTGGCCGTCGCACGGACCCAGTGGGGACTACATCAGGGGATACCTGCCAAATGAAAAGCCT  
 CCCCTCTCGATACATCTATGAGCCCTGGAATGCCCCAGAGTCAATTCAGAAGGCAGCCAAGTGCATCATT  
 GGTGTGGACTACCCACGGCCATCGTCAACCATGCCGAGACCAGCCGGTTAACATTGAACGAATGAAGC  
 AGATTTACCAGCAGCTTTCGCGTACCAGGGACTCTGTCTACTGGCATCTGTCCCTTCTGTGTGAAGA  
 CCTCAGTACCCTGTGGCAGAGCCAGCTCGAGCCAGGCTGGCAGCATGAGCAGTGCAGGCCAAGACCA  
 CTACCCAGTGGCCAGCATCCCCAAACGAAGCTGGAAGCAGCCGAGGAACACCTGGTGAAGAAGTCA  
 GCAAACGGGCCCGGTGGCAGAGTTGCCAACCCAGAGCTGCCGAGCAAGGATGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC225913 representing NM\_001127457  
 Red=Cloning site Green=Tags(s)

MPAPPGRTHTWFLQSLLEDLDTSLRKLNSRLFVVRGQPADVFPRLFKEWGVTRLTFEYDSEPFKGERDAA  
 IMKMAKEAGVEVVTENSHLYDLDRILELNGQKPLTYKRFQAIISRMELPKKPVLVTSQQMESCRAEI  
 QENHDETYGVPSLEELGFPTGLPAVWQGGETEALARLDKHLERKAWVANYERPRMNANSLASPTGLS  
 PYLRFGLSCRLFYYRLWLDYKVKRNSTPPLSLFGQLLWREFFYTAATNNPRFDRMEGNPICIQIPWDR  
 NPEALAKWAEKGTGFPWIDAIMTQLRQEGWIHHLARHAVACFLTRGDLWVSWESGVRVFDLLEDLADFV  
 NAGSMMWLSCSAFFQFFHCYCPVGFGRRTDPSGDYIRRYLPKLKAFPSRYIYEPWNAPESIQAACKII  
 GVDYPRPIVNHAEISRNIERMKQIYQLSRYRGLCLLASVPSCVEDLSHPVAEPSSSQAGSMSSAGPRP  
 LPSGPASPKRKLAAEPPGEELSKRARVAELPTPELPSKDA

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8065\\_h02.zip](https://cdn.origene.com/chromatograms/mk8065_h02.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001127457

**ORF Size:** 1596 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\\_001127457.2](#)

**RefSeq ORF:** 1599 bp

**Locus ID:** 1408

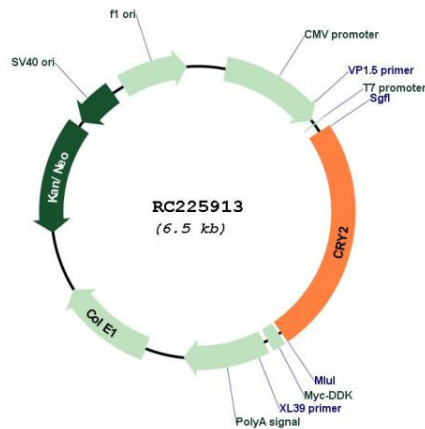
**UniProt ID:** [Q49AN0](#)

**Cytogenetics:** 11p11.2

**Protein Families:** Druggable Genome

Protein Pathways:	Circadian rhythm - mammal
MW:	60.4 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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2014]

## Product images:



Circular map for RC225913