

Product datasheet for **RG229309**

CRY2 (NM_021117) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRY2 (NM_021117) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CRY2
Synonyms:	HCRY2; PHLL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG229309 representing NM_021117
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCGGGTCCACGTCGCTACCGGGCGGAGCGGGGTGGCTGGAGCAGTCTGGACAGTCAATGGCGG
 CGACTGTGGCGACGGCGCAGCTGTGGCCCGGGCCAGCGCCCGGCACGGACAGCGCCTTTCGGTGCA
 CTGGTTCCGCAAAGGGCTGCGACTCCACGACAACCCGGCGTTGCTGGCGGCCGTGCGCGGGGCGCGTGC
 GTGCGCTGCGTTTACATTCTCGACCCGTGGTTCGCGGCCTCCTCCTCAGTCGGGATCAACCGATGGAGGT
 TCCTACTTCAGTCTCTGGAAGATTTGGACACAAGTTAAGGAACTGAACTCCCGCCTGTTTGTAGTCCG
 GGGACAGCCAGCCGACGTGTTCCCAAGGCTGTTCAAGGAATGGGAGTGACCCGCTTGACCTTTGAATAT
 GACTCTGAACCCCTTGGGAAAGAACGGGATGCAGCCATCATGAAGATGGCAAGGAGGCTGGTGTGAAG
 TAGTGACGGAGAATTCTCATACCCTCTATGACCTGGACAGGATCATTGAGCTGAATGGGCAGAAGCCACC
 CCTTACATAACAAGCGCTTTCAGGCCATCATCAGCCGCATGGAGCTGCCAAGAAGCCAGTGGGCTTGGTG
 ACCAGCCAGCAGATGGAGAGCTGCAGGGCCGAGATCCAGGAGAACCACGACGAGACCTACGGCGTGCCT
 CCCTGGAGGAGCTGGGGTCCCCACTGAAGGACTTGGTCCAGCTGTCTGGCAGGGAGGAGAGACAGAAGC
 TCTGGCCCGCTGGATAAGCACTTGAACGGAAGGCTGGGTTGCCAACTATGAGAGACCCGAATGAAC
 GCCAACTCCCTCTGGCCAGCCACAGGCCTCAGCCCTACCTGCGCTTGGTTGTCTCTCTCGCCGCC
 TCTTCTACTACCGCTGTGGGACCTGTAAAAAGGTGAAGCGGAACAGCACACCTCCCTCTCCCTATT
 TGGGCACTCCTATGGCGAGAGTTCTTCTACACGGCAGCTACCAACAACCCAGGTTTGACCGCATGGAG
 GGAACCCCATCTGCATCCAGATCCCTGGGACCGCAATCCTGAGGCCCTGGCAAGTGGGCTGAGGGCA
 AGACAGGCTTCCCTTGGATTGATGCCATCATGACCAACTGAGGCAGGAGGGCTGGATCCACCACCTGGC
 CCGGCATGCCGTGGCCTGCTTCTGACCCGCGGGGACCTCTGGGTCAGCTGGGAGAGCGGGGTCCGGGTA
 TTTGATGAGCTGCTCCTGGATGCAGATTTAGCGTGAACGCAGGAGCTGGATGTGGCTGTCTGCACTG
 CTTTCTCCAGCAGTTCTTCCACTGCTACTGCCCTGTGGGCTTTGGCCGTCGCACGGACCCAGTGGGGA
 CTACATCAGGCGATACCTGCCAAATTGAAAGCGTTCCCTCTCGATACTATGAGCCCTGGAATGCC
 CCAGAGTCAATTCAGAAGGCAGCAAGTGCATCATTGGTGTGGACTACCCAGGCCCATCGTCAACCATG
 CCGAGACCAGCCGGCTTAACATTGAACGAATGAAGCAGATTTACCAGCAGCTTTCGCGCTACCGGGGACT
 CTGTCTACTGGCATCTGTCCCTCTGTGTGGAAGACCTCAGTACCCTGTGGCAGAGCCAGCTCGAGC
 CAGGCTGGCAGCATGAGCAGTGCAGGCCAAGACCACTACCCAGTGGCCAGCATCCCCAAACGCAAGC
 TGGAAGCAGCCGAGGAACCACTGGTGAAGAACTCAGCAAACGGGCCCGGTGGCAGAGTTGCCAACCC
 AGAGCTGCCGAGCAAGGATGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG229309 representing NM_021117
 Red=Cloning site Green=Tags(s)

MGGVHVAYRGGAGVAGAVVTMAATVATAAAVAPAPAGTDSASSVHFRKGLRLHDPALLAAVRGARC
 VRCVYILDPAFAASSVGINRWRFLQLSLEDLDTSLRKLNSRLFVVRGQPADVPRLFKWGVTRLTFEY
 DSEPFGKERDAAIMKMAKEAGVEVVTENSHTLYDLDRILNQGKPLTYKRFQAIISRMELPKKPVGLV
 TSQQMESCRAEIQENHDETYGVPSEELGFPTEGLGPAVWQGGTEALARLDKHLERKAWVANYERPRMN
 ANSLLASPTGLSPYLRFGLSCRLFYYRLWDLYKKVKRNSTPPLSLFGQLLWREFFYTAATNNPRFDRME
 GNPICIQIPWDRNPEALAKWAEGKTGFPWIDAIMTQLRQEGWIHHLARHAVACFLTRGDLWYSWESGVRV
 FDELLLDADFVNAGSMMWLSAFAFFQQFFHCYCPVGFGRRTDPSGDYIRRYLPKLFKAFPSRYIYEPWNA
 PESIQKAAKCIIGVDYPRPIVNHAEISRLNIERMKIYQQLSRYRGLCLLASVPSCEDLSHPVAEPSSS
 QAGSMSSAGPRPLPSGPASPKRKLKLEAAEPPGEELSKRARVAELPTPELPSKDA

TRTRPLE - GFP Tag - V

Restriction Sites:

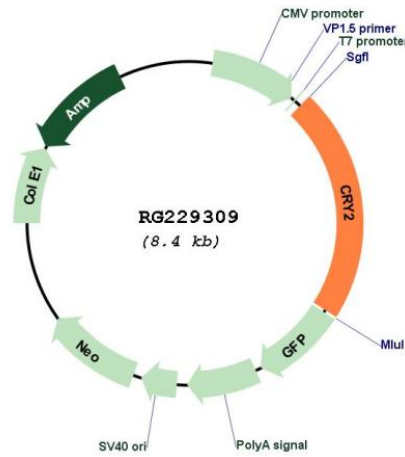
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_021117
 ORF Size: 1842 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:	<ol style="list-style-type: none">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_021117.3 , NP_066940.2
RefSeq Size:	4204 bp
RefSeq ORF:	1782 bp
Locus ID:	1408
UniProt ID:	Q49AN0
Cytogenetics:	11p11.2
Protein Families:	Druggable Genome
Protein Pathways:	Circadian rhythm - mammal
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]