

## Product datasheet for **RG216359**

### **PYCR1 (NM\_153824) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PYCR1 (NM_153824) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PYCR1
Synonyms:	ARCL2B; ARCL3B; P5C; P5CR; PIG45; PP222; PRO3; PYCR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216359 representing NM_153824 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCGTGGGCTTCATCGGCGCTGGCCAGCTGGCTTTTGGCCCTGGCCAAGGGCTTCACAGCAGCAGGGC  
TCTTGGCTGCCACAAGATAATGGCTAGCTCCCCAGACATGGACCTGGCCACAGTTTCTGCTCTCAGGAA  
GATGGGGGTGAAGTTGACACCCCAACAAGGAGACGGTGCAGCACAGTGATGTGCTCTTCTGGCTGTG  
AAGCCACACATCATCCCCTTCATCCTGGATGAAATAGGCGCCGACATTGAGGACAGACACATTGTGGTGT  
CCTGCGCGGCCGGCGTCACCATCAGCTCCATTGAGAAGAAGCTGTCAGCGTTTCGGCCAGCCCCAGGGT  
CATCCGCTGCATGACCAACTCCAGTCGTGGTGCGGGAGGGGGCCACCGTGTATGCCACAGGCACGCAC  
GCCAGGTGGAGGACGGGAGGCTCATGGAGCAGCTGCTGAGCAGCGTGGGCTTCTGCACGGAGGTGGAAG  
AGGACCTGATTGATGCCGTACGGGGCTCAGTGGCAGCGGCCCGCCTACGCATTCACAGCCCTGGATGC  
CCTGGCTGATGGGGGTGAAGATGGGACTTCCAAGGCGCCTGGCAGTCCGCCTCGGGGCCAGGCCCTC  
CTGGGGCTGCCAAGATGCTGCTGCACTCAGAACAGCACCCAGGCCAGCTCAAGGACAACGTGAGCTCTC  
CTGGTGGGGCCACCATCCATGCCTTGCATGTGCTGGAGAGTGGGGCTTCCGCTCCCTGCTCATCAACGC  
TGTGGAGGCTCCTGCATCCGCACACGGGAGCTGCAGTCCATGGCTGACCAGGAGCAGGTGTCACCAGCC  
GCCATCAAGAAGACCATCCTGGACAAGGACCACCTTCTCTAGAGCTCGGGAGCCCGAGGGTCTTACC  
CACTCTACTCCAGTATCAGCTGGCACGGGCTCCTTCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG216359 representing NM\_153824  
Red=Cloning site Green=Tags(s)

MSVGFIGAGQLAFALAKGFTAAGVLA AHKIMASSPMDLATVSALRKMVGKLT PHNKETVQHSDVFLAV  
KPHIIPFILDEIGADIEDRHIVVSCAAGVTISSIEKKLSAFRPAPRVIRCMTNTPVVVREGATVYATGTH  
AQVEDGRLMEQLLSSVGFCTEVEEDLIDAVTGLSGSGPAYAFTALDALADGGVKMGLPRRLAVRLGAQAL  
LGAAKMLLHSEQHPGQLKDNVSSPGGATIHALHVLESGGFRSLLINAVEASCIRTRELQSMADQEQVSPA  
AIKKTILDKDHLPLELGSPEGLHPLLLQYQLARAPS

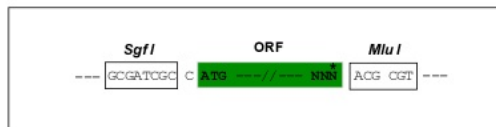
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



```
              Kozac
              Consensus
              Sgf I Asc I
EcoR I BamH I Kpn I RBS
CTATAGGGCCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCCGCGGATCGCCGGCCGCCAGATCT

Hind III Nhe I Rsr II Mlu I Not I Xho I GFP Tag
CAAGCTTAAGTACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
T R T R P L E M E S D - - -

Pme I Fse I
--- GAA GAA AGA GTT TAA ACGGCCGGCCCGGAGCT
- - E E R V stop
```

**ACCN:** NM\_153824

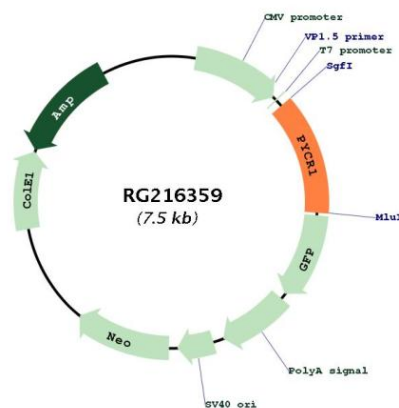
**ORF Size:** 948 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<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>	<u><a href="#">NM_153824.3</a></u>
<b>RefSeq Size:</b>	1768 bp
<b>RefSeq ORF:</b>	951 bp
<b>Locus ID:</b>	5831
<b>UniProt ID:</b>	<u><a href="#">P32322</a></u>
<b>Cytogenetics:</b>	17q25.3
<b>Domains:</b>	P5CR
<b>Protein Pathways:</b>	Arginine and proline metabolism, Metabolic pathways
<b>Gene Summary:</b>	This gene encodes an enzyme that catalyzes the NAD(P)H-dependent conversion of pyrroline-5-carboxylate to proline. This enzyme may also play a physiologic role in the generation of NADP(+) in some cell types. The protein forms a homopolymer and localizes to the mitochondrion. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

**Product images:**


Circular map for RG216359