

Product datasheet for RC216359

PYCR1 (NM_153824) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PYCR1 (NM_153824) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PYCR1
Synonyms:	ARCL2B; ARCL3B; P5C; P5CR; PIG45; PP222; PRO3; PYCR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216359 representing NM_153824 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGTGGGCTTCATCGGCGCTGGCCAGCTGGCTTTTGGCCCTGGCCAAGGGCTTCACAGCAGCAGGGC
TCTTGGCTGCCACAAGATAATGGCTAGCTCCCCAGACATGGACCTGGCCACAGTTTCTGCTCTCAGGAA
GATGGGGGTGAAGTTGACACCCCAACAAGGAGACGGTGCAGCACAGTGATGTGCTCTTCTGGCTGTG
AAGCCACACATCATCCCCTTCATCCTGGATGAAATAGGCGCCGACATTGAGGACAGACACATTGTGGTGT
CCTGCGCGGCCGGCGTCACCATCAGCTCCATTGAGAAGAAGCTGTCAGCGTTTCGGCCAGCCCCAGGGT
CATCCGCTGCATGACCAACTCCAGTCGTGGTGCAGGAGGGGGCCACCGTGTATGCCACAGGCACGCAC
GCCAGGTGGAGGACGGGAGGCTCATGGAGCAGCTGCTGAGCAGCGTGGGCTTCTGCACGGAGGTGGAAG
AGGACCTGATTGATGCCGTACGGGGCTCAGTGGCAGCGGCCCGCTACGCATTCACAGCCCTGGATGC
CCTGGCTGATGGGGGTGAAGATGGGACTTCCAAGGCGCTGGCAGTCCGCCTCGGGGCCAGGCCCTC
CTGGGGCTGCCAAGATGCTGCTGCACTCAGAACAGCACCCAGGCCAGCTCAAGGACAACGTGAGCTCTC
CTGGTGGGGCCACCATCCATGCCTTGCATGTGCTGGAGAGTGGGGGCTCCGCTCCCTGCTCATCAACGC
TGTGGAGGCTCCTGCATCCGCACACGGGAGCTGCAGTCCATGGCTGACCAGGAGCAGGTGTCACCAGCC
GCCATCAAGAAGACCATCCTGGACAAGGACCACCTTCTCTAGAGCTCGGAGCCCGAGGGTCTTACC
CACTCTACTCCAGTATCAGCTGGCAGGGCTCCTTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC216359 representing NM_153824
Red=Cloning site Green=Tags(s)

MSVGFIGAGQLAFALAKGFTAAGVLAHKIMASSPMDLATVSALRKMVKLTPHNKETVQHSDVFLAV
 KPHIIPFILDEIGADIEDRHIVVSCAAGVTISSIEKKLSAFRPAPRVIRCMTNTPVVVREGATVYATGTH
 AQVEDGRLMEQLLSSVGFCTEVEEDLIDAVTGLSGSGPAYAFTALDALADGGVKMGLPRRLAVRLGAQAL
 LGAAKMLLHSEQHPGQLKDNVSSPGGATIHALHVLESGGFRSLLINAVEASCIRTRELQSMADQEQVSPA
 AIKKTILDKDHLPLELGSPEGLHPLLLQYQLARAPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8017_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_153824

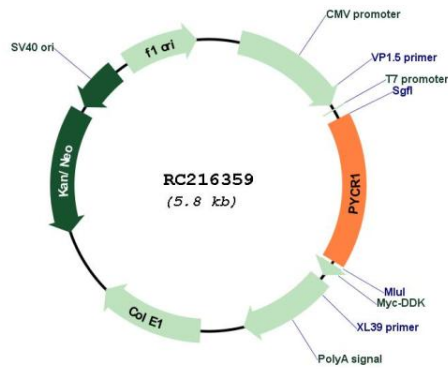
ORF Size: 948 bp

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 or by calling 301.340.3188 option 3 for pricing and delivery.

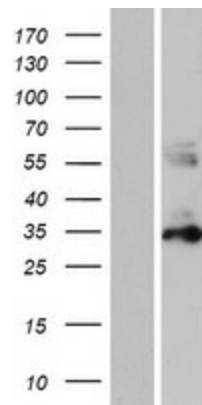
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
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_153824.3
RefSeq Size:	1768 bp
RefSeq ORF:	951 bp
Locus ID:	5831
UniProt ID:	P32322
Cytogenetics:	17q25.3
Domains:	P5CR
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways
MW:	33.2 kDa
Gene Summary:	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]

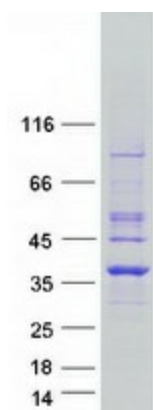
Product images:



Circular map for RC216359



Western blot validation of overexpression lysate (Cat# [LY406968]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216359 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PYCR1 protein (Cat# [TP316359]). The protein was produced from HEK293T cells transfected with PYCR1 cDNA clone (Cat# RC216359) using MegaTran 2.0 (Cat# [TT210002]).