

Product datasheet for **MG204629**

Pycr2 (NM_133705) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pycr2 (NM_133705) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Pycr2
Synonyms: 1810018M05Rik; P5cr2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG204629 representing NM_133705
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCGTGGGTTTCATCGGCGCAGGCCAGCTGGCCTGTGCTCTGGCGGGGCTTCACGGCCGCGGGCG
 TCCTGTCGGCTCACAAGATAATAGCCAGCTCCCCGGATATGGACCTGCCACGGTGTCTGCGCTCAGGAG
 GATGGGTGTGAATCTGACCCGAAGCAATAAGGACTGTGCGGCACAGCGACGTCTCTGCTGGTGTG
 AAGCCCCACATCATCCCCTTCATCCTGGATGAGATTGGAGCCGACGTGCAGGAGAGGCACATCGTGGTCT
 CCTGTGCAGCCGGGTCAACATCAGTTCTGTGGAGAAGAAGCTGATGGCTTCCAGCCGGCCCCAAAGT
 GATCCGCTGCATGACCAACACGCCCGTGGTGGTCCGAGAGGGGGCCACCGTGTATGCCACGGCACCCAT
 GCTCTGGTGAAGACGGCAAGCTTTTGGAGCAGCTGATGAGCAGTGTGGGCTTCTGCACAGAGGTGGAGG
 AAGACCTATTGATGCTATCACCGGGCTCAGCGGCAGCGGGCCTGCCTATGCATTGATGGCCTGGACGC
 CCTGGCAGATGGTGGGTGAAGATGGGCGTGCCGCGCGCCTGGCGGTGACAGTGGGAGCTCAGGCGTTG
 CTGGGAGCAGCTAAGATGCTGCTGGACTCAGAGGACATCCAGGCCAGCTCAAGGACAACGTCTGCTCCC
 CTGGGGGGCCACCATCCATGCCCTGCACTTCTGGAGAGTGGGGCTTCCGCTCTCTGCTCATCAATGC
 GGTTGAGGCTCCTGTATCCGAACCAGAGAAGTGCAGTCCATGGCTGACCAAGAAAAGGTGTCTCCTGCT
 GCCCTTAAGAAGACCTTCTGGACAGAGTGAAGCTGGAGTCAACCCAGGTGTCCACGCTGGCCCCACCCA
 GCTCAGGAAACTCCTTACAAGAAACCCCGCCAGGGAAGCAAGAAGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG204629 representing NM_133705
 Red=Cloning site Green=Tags(s)

MSVGFIGAGQLACALARGFTAAGVLSAHKIIASSPMDLPTVSALRRMGVNLTRSNKDTVHRSDVLFVAV
 KPHIIPFILDEIGADVQERHIVVSCAAGVTISSVEKKLMAFQPAPKVIRCMTNTPVVVREGATVYATGTH
 ALVEDGKLLLEQLMSSVGFCTEVEEDLIDAITGLSGSGPAYAFMALDALADGGVKMGVPRRLAVRLGAQAL
 LGAAKMLLDSEDHPGQLKDNVCSPPGGATIHAIHFLESGGFRSLLINAVEASCIRTRELQSMADQEKVSPA
 ALKKTLLDRVKLESPTVSTLAPPSSGKLLTRNPAQGSKKE

TRTRPLE - GFP Tag - V

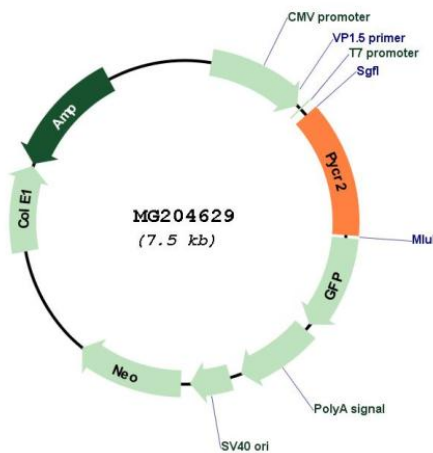
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_133705

ORF Size: 960 bp

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|-------------------------------|---|
| 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_133705.2 |
| RefSeq Size: | 1590 bp |
| RefSeq ORF: | 963 bp |
| Locus ID: | 69051 |
| UniProt ID: | Q922Q4 |
| Cytogenetics: | 1 H4 |
| Gene Summary: | Housekeeping enzyme that catalyzes the last step in proline biosynthesis. In some cell types, such as erythrocytes, its primary function may be the generation of NADP(+). Can utilize both NAD and NADP. Has higher affinity for NADP, but higher catalytic efficiency with NADH (By similarity). Involved in cellular response to oxidative stress (By similarity).[UniProtKB/Swiss-Prot Function] |