

## Product datasheet for MR204629

### Pycr2 (NM\_133705) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pycr2 (NM_133705) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pycr2
Synonyms:	1810018M05Rik; P5cr2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204629 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCGTGGGTTTCATCGGCGCAGGCCAGCTGGCCTGTGCTCTGGCGGGGGCTTCACGGCCGGGGCG  
TCCTGTCGGCTCACAAGATAATAGCCAGCTCCCCGGATATGGACCTGCCACGGTGTCTGCGCTCAGGAG  
GATGGGTGTGAATCTGACCCGAAGCAATAAGGACTGTGCGGCACAGCGACGTCTCTGGCTGTG  
AAGCCCCACATCATCCCCTTCATCCTGGATGAGATTGGAGCCGACGTGCAGGAGAGGCACATCGTGGTCT  
CCTGTGCAGCCGGGTACCATCAGTTCTGTGGAGAAGAAGCTGATGGCTTCCAGCCGGCCCCAAAGT  
GATCCCGTGCATGACCAACAGCCCGTGGTGGTCCGAGAGGGGGCCACCGTGTATGCCACGGCACCCAT  
GCTCTGGTGAAGACGGCAAGCTTTTGGAGCAGCTGATGAGCAGTGTGGGCTTCTGCACAGAGGTGGAGG  
AAGACCTATTGATGCTATCACCGGGCTCAGCGGCAGCGGGCCTGCCTATGCATTGATGGCCTGGACGC  
CCTGGCAGATGGTGGGTGAAGATGGGCGTGCCGCGGCCTGGCGGTGACACTGGGAGCTCAGGCGTTG  
CTGGGAGCAGCTAAGATGCTGCTGGACTCAGAGGACATCCAGGCCAGCTCAAGGACAACGTCTGCTCCC  
CTGGGGGGGCCACCATCCATGCCCTGCACTTCTGGAGAGTGGGGCTTCCGCTCTCTGCTCATCAATGC  
GGTTGAGGCCTCCTGTATCCGAACCAGAGAAGTGCAGTCCATGGCTGACCAAGAAAAGGTGTCTCCTGCT  
GCCCTTAAGAAGACCTTCTGGACAGAGTGAAGCTGGAGTCAACCAGGTGTCCACGCTGGCCCCACCCA  
GCTCAGGAAACTCCTTACAAGAAACCCCGCCAGGGAAGCAAGAAGGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR204629 protein sequence  
Red=Cloning site Green=Tags(s)

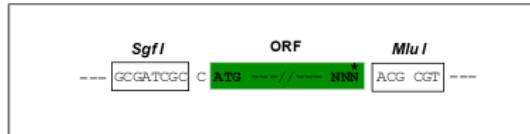
MSVGFIGAGQLACALARGFTAAGVLSAHKIIASSPMDLPTVSALRRMGVNLTRSNKDTVHRSDVLFVAV  
 KPHIIPFILDEIGADVQERHIVVSCAAGVTISSVEKKLMAFQPAPKVIRCMNTNPVVVREGATVYATGTH  
 ALVEDGKLLLEQLMSSVGFCTEVEEDLIDAITGLSGSGPAYAFMALDALADGGVKMGVPRRLAVRLGAQAL  
 LGAAKMLLDSEHPGQLKDNVCSPPGGATIHAIHFLESGGFRSLLINAVEASCIRTRELQSMADQEKVSPA  
 ALKKTLLDRVKLESPTVSTLAPPSSGKLLTRNPAQGSKKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_133705

**ORF Size:** 963 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\\_133705.2](#)

**RefSeq Size:** 1615 bp

**RefSeq ORF:** 963 bp

**Locus ID:** 69051

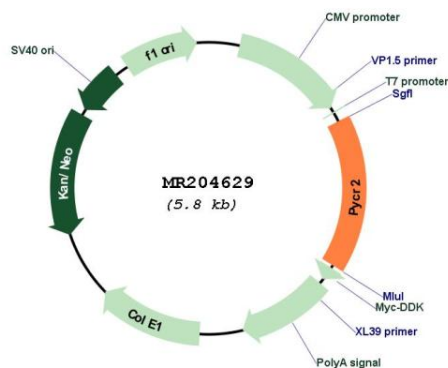
**UniProt ID:** [Q922Q4](#)

**Cytogenetics:** 1 H4

**MW:** 33.7 kDa

**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]

## Product images:



Circular map for MR204629