

## Product datasheet for **MG218939**

### **Pck2 (NM\_028994) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pck2 (NM_028994) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pck2
Synonyms:	1810010O14Rik; 9130022B02Rik; PEPCK-M
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG218939 representing NM\_028994  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTCCTTCCTTCCCCGCTTCCTTGTCTCCCGACTGCGCTCGTTCTGTGGCCATCCCGCAGCGCCA  
 GTCCAGGTGCCATGGCTGCTATGTACCTCCCCGGCTGCGGCTTAGCCGGCACGGGCTAAGGCCCTGGTG  
 CTGGTCACCGTGCCGTAGCATCCAACCCTGCATGTGCTCAGTGGAGATATGAGTCAGCTGCCGGCTGGA  
 GTTCGAGACTTTGTGGCGCGCAGTGCATCTGTGCCAACAGAGGGCATCCACATCTGTGATGGGACCG  
 AGGCTGAGAACACTGCCATACTGGCCCTGCTGGAAGAACAGGGTCTTATCCGCAAACCTCCCAAGTATAA  
 GAACTGCTGGCTGGCCCGCACAGACCCCAAGGATGTGGCACGGGTAGAAAGCAAGACGGTGATTGTAAC  
 CCTTCGACGCGGGACACAGTGCCTCTCTGGCTGGTGGGGCCAGGGGCGAGCTGGCAACTGGATGTCC  
 CAGATGAGTTCAGAGAGCTGTGGACGAGAGATCCCAGGATGCATGCAGGGCCGATTATGTATGTGCT  
 TCCATTACAGATGGGTCCCGTGGCTCCCCTCTCCCGATTGGAGTGCAGCTCACTGACTCGGCTTAC  
 GTGGTGGCCAGTATGCGTATTATGACCCGCTGGGGACACCTGTACTTCAGGCCCTGGGAGATGGTGACT  
 TCATCAAGTGTCTGCATTAGTGGGCCAGCCCCTGACTGGACATGGGGATCCTGTGGGCCAGTGGCCGTG  
 CAATCCAGAAAAACCTGATTGGCCACGTGCCAGACCAGCGGGAGATCGTCTCCTTCGGCAGCGGCTAT  
 GGTGGTAACTCCTTGTGGGCAAGAAGTCTTTGCCCTGCGCATCGCCTCTCGCTGGCCAGGGATGAGG  
 GCTGGCTGGCAGAGCACATGCTGATTTTGGGCATACCAACCCTGCAGGGAAAAAGCGCTACGTGGCAGC  
 TGCTTTCCCCAGTGCCTGTGGCAAGACCAATCTGGCCATGATGAGGCCTGCATTGCCGGGCTGAAAAGTG  
 GAGTGTGTGGGGATGACATCGCCTGGATGAGGTTTGACAGTGAAGGTCAACTCCGGGCCATCAACCCTG  
 AGAATGGCTTCTTTGGGGTGGCCCTGGTACCTCTGCTGCCACCAATCCCAATGCCATGGCCACAATTCA  
 GAGTAATACTCTTTCACCAACGTGGCTGAGACCAGTGTGGCGGTGTGTACTGGGAAGGCATTGACCAG  
 CCTCTTCCGCTGGTGTACCATAACTCGTGGCTGGGAAAGCCCTGGAAACCTGGTGACAAGGAACCTT  
 GTGCACATCCAACTCGCGCTTTTGTGTCCCGCTCGCCAGTGCCCATCATGGACCCAGCCTGGGAAGC  
 ACCAGAAGGTGTCCCTATTGATGCCATCATCTTTGGAGGCCGCGACCCAAAGGGGTACCACTGGTGTAC  
 GAGGCCTTCAACTGGCGTCATGGGGTGTGTAGGTAGCGCCATGCGCTCTGAGTCCACTGCCGCTGCGG  
 AGCACAAAGGAAAGACCATTATGCATGATCCCTTTGCCATGCGGCCTTTTTTTGGCTATAACTTTGGACG  
 CTACCTGGAACACTGGTTGAGCATGGAGGGACAAAAGGTGCCCGGCTGCCTCGTATCTTCCATGTCAAT  
 TGTTCCGGAGAGATGAAGCAGGCCGCTTCTGTGGCCAGGCTTTGGAGAGAATGCTCGTGTGCTAGACT  
 GGATCTGCCGAAGATTAGAAGGAGAAGACAGTGCCCAAGAGACTCCCATTTGGGCTAGTACCAAAGGAAGG  
 AGCCCTGGACCTCAGTGGCCTCAGCGCAGTGGACACCAGTCAAGTGTCTCCATCCCAAGGACTTCTGG  
 GAGCAGGAGGTTCTGATATTCCGGGCTACCTGACAGAGCAAGTCAACCAGGACCTGCCAAGGAGGTGT  
 TGGCTGAGCTCGAGGCCCTGGAAGGACGTGTACAAAAATG

**ACGCGTACGCGGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG218939 representing NM\_028994  
Red=Cloning site Green=Tags(s)

```

MLLPSPPSLSPRLRSFLWPSRSASPGAMAAMYL PGLRLSRHGLRPWCWSPCRSIQTLHVLSGDMSQLPAG
VRDFVARSAHLCPQEGIHICDGTAEANTAILALLEEQLIRKLPKYKNCWLARTDPKDVARVESKTVIVT
PSQRDTVPLLAGGARGQLGNWMSDEFQRAVDERFPGCMQGRIMYVLPFSMGPVGSPLSRIGVQLTDSAY
VVASMRIMTRLGTPVLQALGDGDFIKCLHSVGQPLTGHGDPVGVQWPCNPEKTLIGHVDPQREIVSFGSGY
GGNSLLGKKCFALRIASRLARDEGWLAEHMLILGITNPAGKKRYVAAAFPSACGKTNLAMMRPALPGWKV
ECVGDIIAWMRFDSEQLRAINPENGFVGVAPGTSAAATNPAMATIQSNTLFTNVAETS DGGVYWEIDQ
PLPPGVTITSWLGKPKPGDKEPCAHPNSRFCVPARQCPIMDPAWEAPEGVPIDAIIIFGRRPKGVPLVY
EAFNWRHGVFVGSAMRSESTAAAEHKGKTIMHDPFAMRPFYGNYFGRYLEHWLSMEGQKGARLPRIFHVN
WFRRDEAGRFLWPGFGENARVLDWICRRLEGEDSAQETPIGLVPKEGALDLSGLSAVDTSQLFSIPKDFW
EQEVRDIRGYL TEQVNQDLPKEVLAELEALEGRVQKM
    
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_028994

**ORF Size:** 2001 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\\_028994.2](#), [NP\\_083270.1](#)

**RefSeq Size:** 3400 bp

**RefSeq ORF:** 1923 bp

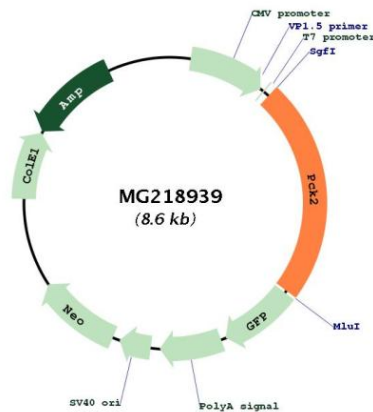
**Locus ID:** 74551

**UniProt ID:** [Q8BH04](#)

**Cytogenetics:** 14 28.19 cM

**Gene Summary:** Catalyzes the conversion of oxaloacetate (OAA) to phosphoenolpyruvate (PEP), the rate-limiting step in the metabolic pathway that produces glucose from lactate and other precursors derived from the citric acid cycle.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG218939