

## Product datasheet for **MG203555**

### Penk (NM\_001002927) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Penk (NM\_001002927) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Penk  
**Synonyms:** AI326464; ENK; Penk1; PPA  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG203555 representing NM\_001002927  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGCGTTCTGAGGCTTTGCACCTGGCTGCTGGCGCTTGGGTCTGCCTCCTGGCTACAGTGCAGG  
 CGGAATGCAGCCAGGACTGCGCTAAATGCAGCTACCGCTGGTTCGCCAGGCGACATCAATTTCTGGC  
 GTGCACACTGGAATGTGAAGGACAGCTGCCTTCTTTCAAATCTGGGAGACCTGCAAGGATCTCCTGCAG  
 GTGTCCAGGCCGAGTTCCTTTGGGATAACATCGACATGTACAAAGACAGCAGCAACAGGATGAGAGCC  
 ACTTGCTAGCCAAGAAGTACGGAGGCTTCATGAAACGGTACGGAGGCTTCATGAAGAAGATGGACGAGCT  
 ATATCCCATGGAGCCAGAAGAAGCGAACGGAGGAGAGATCCTTGCCAAGAGGTATGGCGGCTTCATG  
 AAGAAGGATGCAGATGAGGGAGACACCTTGCCCAACTCCTCCGATCTGCTGAAAGAGCTACTGGGAACGG  
 GAGACAACCGTGCGAAAGACAGCCACCAACAAGAGAGCACCAACAATGACGAAGACATGAGCAAGAGGTA  
 TGGGGGCTTCATGAGAAGCCTCAAAGAAGCCCCAACTGGAAGATGAAGCAAAAGAGCTGCAGAAGCGC  
 TACGGGGCTTCATGAGAAGGTTGGGACGCCCGAGTGGTGGATGGACTACCAGAAGAGGTATGGGGCT  
 TCCTGAAGCGCTTTGCTGAGTCTCTGCCCTCCGATGAAGAAGCGAAAATTACTGAAAGAAGTTCTCTGA  
 GATAGAGAAAAGATACGGGGCTTTATGCGGTTT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG203555 representing NM\_001002927  
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MARFLRLCTWLLALGSCLLATVQAECSDCAKCSYRLVRPGDINFLACTLECEGQLPSFKIWETCKDLLQ  
 VSRPEFPWDNIDMYKDSSKQDESHLLAKKYGGFMKRYGGFMKKMDELYPMEPEEEANGGELAKRYGGFM  
 KKDADEGDTLANSDDLKELLGTGDNRAKDSHQQESTNNDSDMSKRYGGFMRSCLKRSPQLEDEAKELQKR  
 YGGFMRRVGRPEWMDYQKRYGGFLKRF AESLPSDEEGENYSKEVPEIEKRYGGFMRF

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1760\\_c03.zip](https://cdn.origene.com/chromatograms/ja1760_c03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001002927

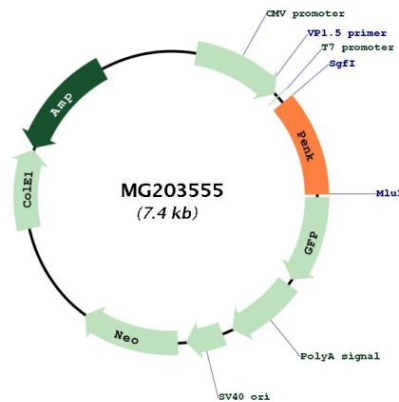
**ORF Size:** 804 bp

**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>NM_001002927.3</u>
<b>RefSeq Size:</b>	1443 bp
<b>RefSeq ORF:</b>	807 bp
<b>Locus ID:</b>	18619
<b>UniProt ID:</b>	<u>P22005</u>
<b>Cytogenetics:</b>	4 2.31 cM
<b>Gene Summary:</b>	Met- and Leu-enkephalins compete with and mimic the effects of opiate drugs. They play a role in a number of physiologic functions, including pain perception and responses to stress. PENK(114-133) and PENK(238-259) increase glutamate release in the striatum. PENK(114-133) decreases GABA concentration in the striatum.[UniProtKB/Swiss-Prot Function]

**Product images:**


Circular map for MG203555