

Product datasheet for **MC209162**

Penk (NM_001002927) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Penk (NM_001002927) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Penk
Synonyms:	A1326464; ENK; Penk1; PPA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC209162 representing NM_001002927 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGGTTCTGAGGCTTTGCACCTGGCTGCTGGCGCTTGGGTCTGCCTCCTGGCTACAGTGCAGG
CGGAATGCAGCCAGGACTGCGCTAAATGCAGCTACCGCTGGTTCGCCAGGCGACATCAATTTCTGGC
GTGCACACTGGAATGTGAAGGACAGCTGCCTTCTTTCAAATCTGGGAGACCTGCAAGGATCTCCTGCAG
GTGTCCAGGCCGAGTTCCTTTGGGATAACATCGACATGTACAAAGACAGCAGCAACAGGATGAGAGCC
ACTTGCTAGCCAAGAAGTACGGAGGCTTCATGAAACGGTACGGAGGCTTCATGAAGAAGATGGACGAGCT
ATATCCCATGGAGCCAGAAGAAGCGAACGGAGGAGAGATCCTTGCCAAGAGGTATGGCGGCTTCATG
AAGAAGGATGCAGATGAGGGAGACACCTTGCCCAACTCCTCCGATCTGCTGAAAGAGCTACTGGGAACGG
GAGACAACCGTGCGAAAGACAGCCACCAACAAGAGAGCACCAACAATGACGAAGACATGAGCAAGAGGTA
TGGGGGCTTCATGAGAAGCCTCAAAGAAGCCCCAACTGGAAGATGAAGCAAAAGAGCTGCAGAAGCGC
TACGGGGCTTCATGAGAAGGTGGGACGCCCGAGTGGTGGATGGACTACCAGAAGAGGTATGGGGCT
TCCTGAAGCGCTTTGCTGAGTCTCTGCCCTCCGATGAAGAAGCGAAAATTACTCGAAAGAAGTTCTCTGA
GATAGAGAAAAGATACGGGGCTTTATGCGGTTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_001002927
Insert Size:	807 bp



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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](#)

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_001002927.2](#), [NP_001002927.1](#)

RefSeq Size: 1442 bp

RefSeq ORF: 807 bp

Locus ID: 18619

UniProt ID: [P22005](#)

Cytogenetics: 4 2.31 cM

Gene Summary: 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]