

Product datasheet for **RG207563**

Enkephalin (PENK) (NM_006211) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Enkephalin (PENK) (NM_006211) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Enkephalin
Synonyms:	enkephalin A; preproenkephalin; proenkephalin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207563 representing NM_006211 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGTTCTGACACTTTGCACTTGGCTGCTGTTGCTCGGCCCGGGCTCCTGGCGACCGTGCGGG
CCGAATGCAGCCAGGATTGCGCGACGTGCAGCTACCGCCTAGTGCGCCCGCCGACATCACTTCTCTGGC
TTGCGTAATGGAATGTGAAGGTAAGTGCCTTCTCTGAAAATTTGGAAACCTGCAAGGAGCTCCTGCAG
CTGTCAAACCCAGAGCTTCTCAAGATGGCACCAGCACCTCAGAGAAAAATAGCAAACCGGAAGAAAGCC
ATTTGCTAGCCAAAAGGTATGGGGCTTCATGAAAAGGTATGGAGGCTTCATGAAGAAAAATGGATGAGCT
TTATCCCATGGAGCCAGAAGAAGAGGCCAATGGAAGTGAGATCCTCGCCAAGCGGTATGGGGCTTCATG
AAGAAGGATGCAGAGGAGGACGACTCGCTGGCCAATTCCTCAGACCTGCTAAAAGAGCTTCTGGAACAG
GGGACAACCGAGAGCGTAGCCACCACCAGGATGGCAGTGATAATGAGGAAGAAGTGAGCAAGAGATATGG
GGGCTTCATGAGAGGCTTAAAGAGAAGCCCCAACTGGAAGATGAAGCCAAGAGCTGCAGAAGCGATAT
GGGGCTTCATGAGAAGAGTAGGTCGCCAGAGTGGTGGATGGACTACCAGAAACGGTATGGAGGTTTCC
TGAAGCGCTTTGCCGAGGCTCTGCCCTCCGACGAAGAAGGCGAAAGTTACTCCAAAGAAGTTCTGAAAT
GGAAAAAAGATACGGAGGATTTATGAGATTT

AG**CGGACCG**ACGCGTACGCGCCGCTCGAG - GFP Tag - GTTTAA



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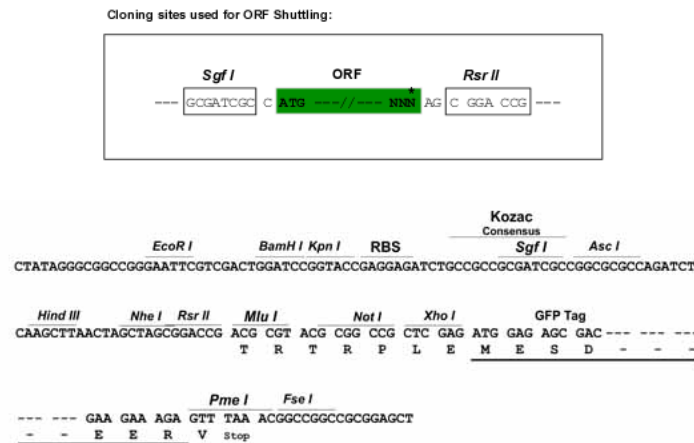
Protein Sequence: >RG207563 representing NM_006211
Red=Cloning site Green=Tags(s)

MARFLTLCWLLLLGPGLLATVRAECSQDCATCSYRLVRPADINFLACVMECEGKLP SLKIWETCKELLQ
 LSKPELPQDGTSTLRENSKPEESHLLAKRYGGFMKRYGGFMKKMDEL YPMEPEEEANGSEILAKRYGGFM
 KKDAEEDDSLANSDDLKELLETDGNRERSHHQDGDNEEEVSKRYGGFM RGLKRSPQLEDEAKELQKRY
 GGFMRVRGRPEWMDYQKRYGGFLKRF AEALPSDEEGESYSKEVPEMEKRYGGFMRF

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_006211

ORF Size: 801 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_006211.3](#)

RefSeq Size: 1239 bp

RefSeq ORF: 804 bp

Locus ID: 5179

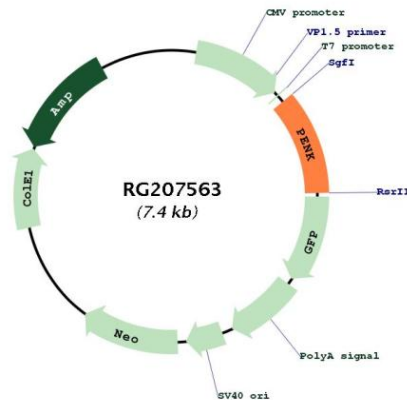
Cytogenetics: 8q12.1

Domains: Opioids_neuropep

Protein Families: Secreted Protein

Gene Summary: This gene encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include the pentapeptide opioids Met-enkephalin and Leu-enkephalin, which are stored in synaptic vesicles, then released into the synapse where they bind to mu- and delta-opioid receptors to modulate the perception of pain. Other non-opioid cleavage products may function in distinct biological activities. [provided by RefSeq, Jul 2015]

Product images:



Circular map for RG207563