

## Product datasheet for **RC233558**

### ProDynorphin (PDYN) (NM\_001190898) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ProDynorphin (PDYN) (NM_001190898) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ProDynorphin
Synonyms:	ADCA; PENKB; SCA23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC233558 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGCCTGGCAGGGGCTGGTCTGGCTGCCTCCTCATGTTCCCTCCACCACAGCGGACTGCCTGT  
CGCGGTGCTCCTTGTGTGCTGTAAGACCCAGGATGGTCCAAACCTATCAATCCCCTGATTTGCTCCCT  
GCAATGCCAGGCTGCCCTGCTGCCCTCTGAGGAATGGGAGAGATGCCAGAGCTTTCTGTCTTTTTTCACC  
CCCTCCACCCTTGGGCTCAATGACAAGGAGGACTTGGGGAGCAAGTCGGTTGGGAAGGGCCCTACAGTG  
AGCTGGCCAAGCTCTCTGGGTATTCTGAAGGAGCTGGAGAAAAGCAAGTTTCTCCAAGTATCTCAAC  
AAAGGAGAACTCTGAGCAAGAGCCTGGAGGAGAAGCTCAGGGGTCTCTGACGGTTTAGGGAGGGA  
GCAGAGTCTGAGCTGATGAGGGATGCCAGCTGAACGATGGTCCATGGAGACTGGCACACTCTATCTCG  
CTGAGGAGGACCCCAAGGAGCAGGTCAAACGCTATGGGGCTTTTTGCGCAAATACCCCAAGAGGAGCTC  
AGAGGTGGCTGGGGAGGGGACGGGATAGCATGGGCCATGAGGACCTGTACAAACGCTATGGGGCTTC  
TTGCGGCGCATTCTGCCAAGCTCAAGTGGGACAACCAGAAGCGCTATGGCGTTTTCTCCGGCGCCAGT  
TCAAGGTGGTGAATCGGCTCAGGAAGATCCGAATGCTTACTCTGGAGAGCTTTTTGATGCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC233558 protein sequence  
 Red=Cloning site Green=Tags(s)

MAWQGLVLAACLMLFPSTTADCLSRCSLCAVKTQDGPKPINPLICSLQCQAALLPSEEWERCQSFLSFFT  
 PSTLGLNDKEDLGSKSVGEGPYSELAKLGSFSLKELEKSKFLPSISTKENTLSKSLEEKLRGLSDGFREG  
 AESELMRDAQLNDGAMETGTLYLAEEDPKEQVKRYGGFLRKYPKRSSEVAGEGDGDSMGHEDLYKRYGGF  
 LRRIRPKLKWQNKRYGGFLRRQFKVVTRSQEDPNAYSSELFDA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6026\\_f11.zip](https://cdn.origene.com/chromatograms/mk6026_f11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_001190898

**ORF Size:** 762 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\\_001190898.3](#)

**RefSeq Size:** 2797 bp

**RefSeq ORF:** 765 bp

**Locus ID:** 5173

**UniProt ID:** [P01213](#)

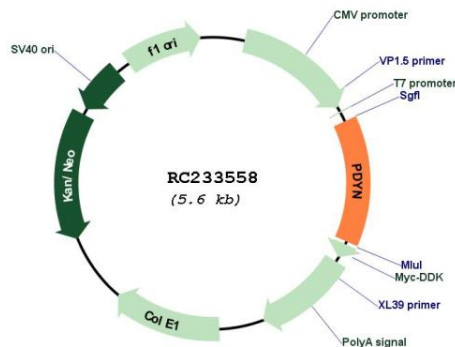
**Cytogenetics:** 20p13

**Protein Families:** Secreted Protein

**MW:** 28.4 kDa

**Gene Summary:** The protein encoded by this gene is a preproprotein that is proteolytically processed to form the secreted opioid peptides beta-neoendorphin, dynorphin, leu-enkephalin, rimorphin, and leumorphin. These peptides are ligands for the kappa-type of opioid receptor. Dynorphin is involved in modulating responses to several psychoactive substances, including cocaine. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2010]

## Product images:



Circular map for RC233558