

Product datasheet for **RC205331**

ProDynorphin (PDYN) (NM_024411) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ProDynorphin (PDYN) (NM_024411) 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:	>RC205331 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTGGCAGGGGCTGGTCCTGGCTGCCTCCTCATGTTCCCTCCACCACAGCGGACTGCCTGT
CGCGGTGCTCCTTGTGTGCTGTAAGACCCAGGATGGTCCAAACCTATCAATCCCCTGATTTGCTCCCT
GCAATGCCAGGCTGCCCTGCTGCCCTCTGAGGAATGGGAGAGATGCCAGAGCTTTCTGTCTTTTTCCACC
CCCTCCACCCTTGGGCTCAATGACAAGGAGGACTTGGGGAGCAAGTCGGTTGGGAAGGGCCCTACAGTG
AGCTGGCCAAGCTCTCTGGGTCAATCCTGAAGGAGCTGGAGAAAAGCAAGTTTCTCCAAGTATCTCAAC
AAAGGAGAACTCTGAGCAAGAGCCTGGAGGAGAAGCTCAGGGGTCTCTGACGGTTTAGGGAGGGA
GCAGAGTCTGAGCTGATGAGGGATGCCAGCTGAACGATGGTGCCATGGAGACTGGCACACTCTATCTCG
CTGAGGAGGACCCCAAGGAGCAGGTCAAACGCTATGGGGGCTTTTTCGCAAAATACCCCAAGAGGAGCTC
AGAGGTGGCTGGGGAGGGGACGGGATAGCATGGGCCATGAGGACCTGTACAAACGCTATGGGGCTTC
TTGCGGCGCATTCTGCCAAGCTCAAGTGGGACAACCAGAAGCGCTATGGCGGTTTTCTCCGGCGCCAGT
TCAAGGTGGTGAATCGGTCAGGAAGATCCGAATGCTTACTCTGGAGAGCTTTTTGATGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205331 protein sequence
Red=Cloning site Green=Tags(s)

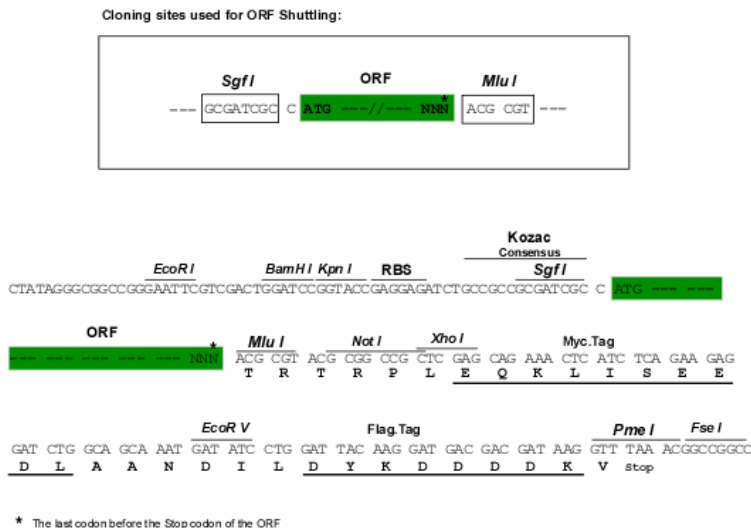
MAWQGLVLAACLMLFPSTTADCLSRCSLCAVKTQDGPKPINPLICSLQCQAALLPSEEWERCQSFLSFFT
 PSTLGLNDKEDLGSKSVGEGPYSELAKLGSFSLKELEKSKFLPSISTKENTLSKSLEEKLRGLSDGFREG
 AESELMRDAQLNDGAMETGTLYLAEEDPKEQVKRYGGFLRKYPKRSSEVAGEGDGDSMGHEDLYKRYGGF
 LRRIRPKLKWQKRYGGFLRRQFKVVTRSQEDPNAYSSELFDFA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6026_f11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_024411

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_024411.5](#)

RefSeq Size: 2800 bp

RefSeq ORF: 765 bp

Locus ID: 5173

UniProt ID: [P01213](#)

Cytogenetics: 20p13

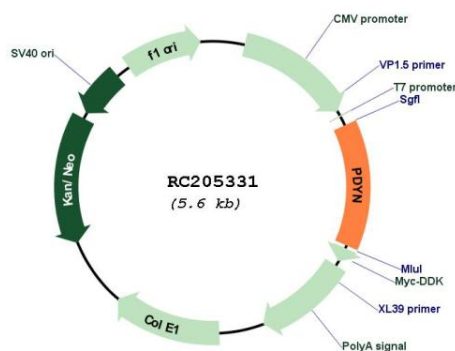
Domains: Opioids_neuropep

Protein Families: Secreted Protein

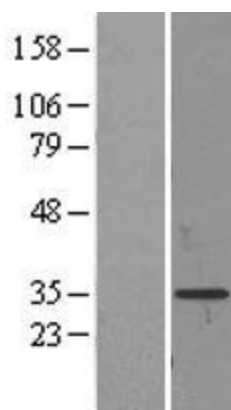
MW: 28.4 kDa

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 RC205331



Western blot validation of overexpression lysate (Cat# [LY402991]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205331 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).