

Product datasheet for RC206443

Nociceptin (PNO) (NM_006228) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nociceptin (PNO) (NM_006228) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Nociceptin
Synonyms: N/OFQ; NOP; OFQ; ppN/OFQ; PPNO
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC206443 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAAGTCTGCTTTGTGACCTGCTGCTCAGTCTCTTCCAGTGTGTTCCAGCAGTTGTCAGAGGG
 ACTGTCTCACATGCCAGGAGAAGCTCCACCCAGCCCTGGACAGCTTCGACCTGGAGGTGTGCATCCTCGA
 GTGTGAAGAGAAGGTCTTCCCCAGCCCCCTCTGGACTCCATGCACCAAGGTCATGGCCAGGAGCTTTGG
 CAGCTCAGCCCTGCCGCCAGAGCATGTGGCGGCTGCTCTACCAGCCGAGAGCTTCGGAGATGCAGC
 ATCTGCGCGAATGCCCCGAGTCCGGAGCTTGTCCAGGAGCAGGAAGAGCCCGAGCCTGGCATGGAGGA
 GGCTGGTGGATGGAGCAGAAGCAGCTGCAGAAGAGATTTGGGGGCTTACCGGGGCCCGGAAGTCGGCC
 AGGAAGTTGGCCAATCAGAAGCGGTTTCAGTGAGTTATGAGGCAATACTTGGTCTGAGCATGCAGTCCA
 GCCAGCGCCGGCGCACCTGCACCAGAATGGTAATGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206443 protein sequence
 Red=Cloning site Green=Tags(s)

MKVLLCDLLLLSLFSSVFSSQQRDCLTCQEKLHPALDSFDLEVCILECEEKVFPSPLWTPCTKVMARSSW
 QLSPAPEHVAALYQPRASEMQLRRMPRVSLFQEQEPEPGMEEAGEMEQLKQKRFGGFTGARKSA
 RKLANQKRFSEFMRQYLVL SMQSSQRRRTLHQNGNV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6330_d03.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006228

ORF Size: 528 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_006228.5](#)

RefSeq Size: 1215 bp

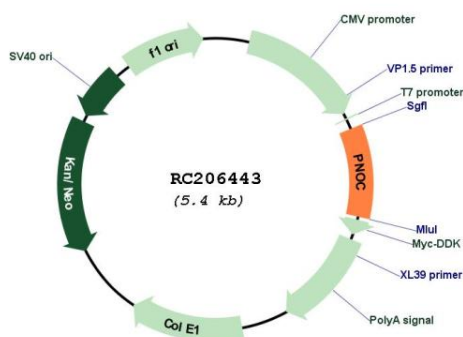
RefSeq ORF: 531 bp

Locus ID: 5368

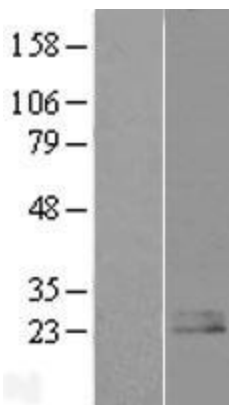
UniProt ID: [Q13519](#)

Cytogenetics:	8p21.1
Domains:	Opioids_neuropep
Protein Families:	Secreted Protein
MW:	20.3 kDa
Gene Summary:	This gene encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include nociceptin, nocistatin, and orphanin FQ2 (OFQ2). Nociceptin, also known as orphanin FQ, is a 17-amino acid neuropeptide that binds to the nociceptin receptor to induce increased pain sensitivity, and may additionally regulate body temperature, learning and memory, and hunger. Another product of the encoded preproprotein, nocistatin, may inhibit the effects of nociceptin. [provided by RefSeq, Jul 2015]

Product images:



Circular map for RC206443



Western blot validation of overexpression lysate (Cat# [LY416784]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206443 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).