

## Product datasheet for **RG206443**

### 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:** TurboGFP  
**Symbol:** Nociceptin  
**Synonyms:** N/OFQ; NOP; OFQ; ppN/OFQ; PPNOC  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG206443 representing NM\_006228  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAAGTCTGCTTTGTGACCTGCTGCTCAGTCTCTTCTCCAGTGTGTTCCAGCAGTTGTCAGAGGG  
 ACTGTCTCACATGCCAGGAGAAGCTCCACCCAGCCCTGGACAGCTTCGACCTGGAGGTGTGCATCCTCGA  
 GTGTGAAGAGAAGGTCTTCCCCAGCCCCCTCTGGACTCCATGCACCAAGGTCATGGCCAGGAGCTTTGG  
 CAGCTCAGCCCTGCCGCCAGAGCATGTGGCGGCTGCTCTACCAGCCGAGAGCTTCGGAGATGCAGC  
 ATCTGCGCGAATGCCCGAGTCCGGAGCTTGTCCAGGAGCAGGAAGAGCCCGAGCCTGGCATGGAGGA  
 GGCTGGTGGAGATGGAGCAGAAGCAGCTGCAGAAGAGATTTGGGGGCTTACCGGGGCCCGGAAGTCGGCC  
 AGGAAGTTGGCCAATCAGAAGCGGTTTCAGTGAGTTTATGAGGCAATACTTGGTCTGAGCATGCAGTCCA  
 GCCAGCGCCGGCGCACCTGCACCAGAATGGTAATGTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG206443 representing NM\_006228  
 Red=Cloning site Green=Tags(s)

MKVLLCDLLLLSLFSSVFSSCQRDCLTCQEKLHPALDSFDLEVCILECEEKVFPSPLWTPCTKVMARSSW  
 QLSPAAPEHVAAALYQPRASEMQLRRMPVRVSLFQEQEPEPGMEEAGEMEQLKQKRFGGFTGARKSA  
 RKLANQKRFSEFMRQYLVL SMQSSQRRRTLHQNGNV

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**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:** 1198 bp

**RefSeq ORF:** 531 bp

**Locus ID:** 5368

**UniProt ID:** [Q13519](#)

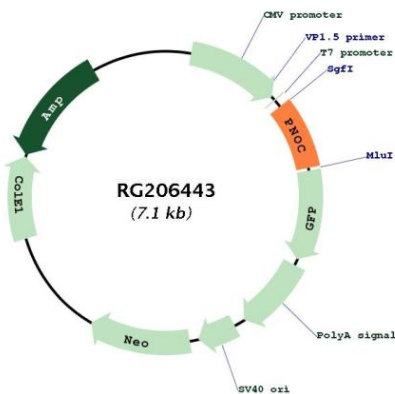
**Cytogenetics:** 8p21.1

**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 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 RG206443