

Product datasheet for RC212937

Nociceptin receptor (OPRL1) (NM_000913) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Nociceptin receptor (OPRL1) (NM_000913) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Nociceptin receptor |
| Synonyms: | KOR-3; KOR3; NOCIR; NOP; NOPr; OOR; OPRL; ORL1; PNOCR |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC212937 representing NM_000913 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCCTCTCCCCGCGCGTTCTGGGAGGTTATCTACGGCAGCCACCTTCAGGGCAACCTGTCCC
TCCTGAGCCCAACACAGTCTGCTGCCCCGCATCTGCTGCTCAATGCCAGCCACGGCGCTTCTCTGCC
CCTCGGGCTCAAGGTACCATCGTGGGGCTCTACCTGGCCGTGTGTGTCGGAGGGCTCCTGGGAACTGC
CTTGTCATGTACGTCATCCTCAGGCACACAAAATGAAGACAGCCACCAATATTTACATCTTTAACCTGG
CCCTGGCCGACACTCTGGTCTGCTGACGCTGCCCTTCCAGGGCACGGACATCCTCCTGGGCTTCTGGCC
GTTTGGGAATGCCTGTGCAAGACAGTCATTGCCATTGACTACTACAACATGTTCCACGACCTTACC
CTAACTGCCATGAGTGTGGATCGTATGTAGCCATCTGCCACCCATCCGTGCCCTCGACGTCGGCAGCT
CCAGCAAAGCCCAGGCTGTTAATGTGGCCATCTGGGCCCTGGCCTCTGTTGTCGGTGTCCCGTTGCCAT
CATGGGCTCGGCACAGGTCGAGGATGAAGAGATCGAGTGCCTGGTGGAGATCCCTACCCCTCAGGATTAC
TGGGGCCCGGTGTTTGCCATCTGCATCTTCTCTTCTCCTTCATCGTCCCGTGCCTCATCTCTGTCT
GCTACAGCCTCATGATCCGGCGGCTCCGTGGAGTCCGCTGCTCTCGGGTCCCAGAGAGAAGGACCGGAA
CCTGCGGCGCATCACTCGGCTGGTGTGGTGGTAGTGGCTGTGTTCGTGGGCTGCTGGACGCTGTCCAG
GTCTTCGTGCTGGCCCAAGGGCTGGGGTTTCAGCCGAGCAGGACTGCCGTGGCCATTCTGCGCTTCT
GCACGGCCCTGGGCTACGTCAACAGCTGCCTCAACCCCATCCTCTACGCCTTCTGGATGAGAACTTCAA
GGCCTGCTTCCGCAAGTTCTGCTGTGCATCTGCCCTGCGCCGGGACGTGCAGGTGTCTGACCGCGTGGC
AGCATTGCCAAGGACGTGGCCCTGGCCTGCAAGACCTCTGAGACGGTACCGGGCCCGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC212937 representing NM_000913
Red=Cloning site Green=Tags(s)

MEPLFPAPFWEVIYGSHLQGNLSLLSPNHSLPPHLLLNASHGAFPLGLKVTIVGLYLAVCVGGLLGNC
 LVMYVILRHTKMKATNIYIFNLALADTLVLLTLPFQGDILLGFWPFGNALCKTVIAIDYYNMFSTFT
 LTAMSVDRYVAICHPIRALDVRTSSKAQAVNVAIWALASVVGVPVAIMGSAQVEDEEIECLVEIPTPDY
 WGPVFAICIFLFSFIVPVLVISVCYSLMIRRLRGVRLLSGSREKDRNLRRITRLVLVVAVFVGCWTPVQ
 VFVLAQGLGVQPSSETAVAILRFCTALGYVNSCLNPILYAFLDENFKACFRKFCASALRRDVQVSDRVR
 SIAKDVALACKTSETVPRPA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6282_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000913

ORF Size: 1110 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_000913.6](#)

RefSeq Size: 3208 bp

RefSeq ORF: 1113 bp

Locus ID: 4987

UniProt ID: [P41146](#)

Cytogenetics: 20q13.33

Domains: 7tm_1

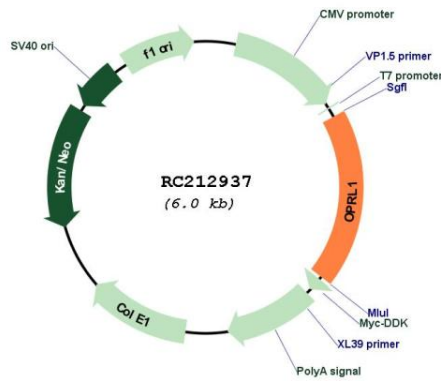
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

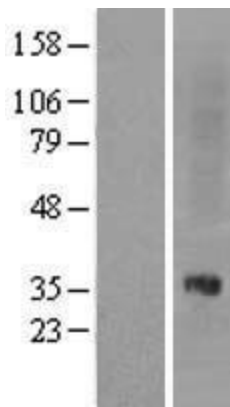
MW: 40.5 kDa

Gene Summary: The protein encoded by this gene is a member of the 7 transmembrane-spanning G protein-coupled receptor family, and functions as a receptor for the endogenous, opioid-related neuropeptide, nociceptin/orphanin FQ. This receptor-ligand system modulates a variety of biological functions and neurobehavior, including stress responses and anxiety behavior, learning and memory, locomotor activity, and inflammatory and immune responses. A promoter region between this gene and the 5'-adjacent RGS19 (regulator of G-protein signaling 19) gene on the opposite strand functions bi-directionally as a core-promoter for both genes, suggesting co-operative transcriptional regulation of these two functionally related genes. Alternatively spliced transcript variants have been described for this gene. A recent study provided evidence for translational readthrough in this gene, and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon. [provided by RefSeq, Dec 2017]

Product images:



Circular map for RC212937



Western blot validation of overexpression lysate (Cat# [LY424459]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212937 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).