

## Product datasheet for **RG212937**

### 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:	TurboGFP
Symbol:	Nociceptin receptor
Synonyms:	KOR-3; KOR3; NOCIR; NOP; NOPr; OOR; OPRL; ORL1; PNOCR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG212937 representing NM_000913 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCCCTCTCCCCGCGCGTTCTGGGAGGTTATCTACGGCAGCCACCTTCAGGGCAACCTGTCCC  
TCCTGAGCCCAACCACAGTCTGCTGCCCCGCATCTGCTGCTCAATGCCAGCCACGGCGCTTCTGCCC  
CCTCGGGCTCAAGGTCACCATCGTGGGGCTCTACCTGGCCGTGTGTGTCGGAGGGCTCTGGGAACTGC  
CTTGTCATGTACGTCATCCTCAGGCACACAAAATGAAGACAGCCACCAATATTTACATCTTTAACCTGG  
CCCTGGCCGACACTCTGGTCTGCTGACGCTGCCCTTCCAGGGCACGGACATCCTCTGGGCTTCTGGCC  
GTTTGGGAATGCCTGTGCAAGACAGTCATTGCCATTGACTACTACAACATGTTCCACCAGCACCTTACC  
CTAACTGCCATGAGTGTGGATCGTATGTAGCCATCTGCCACCCATCCGTGCCCTCGACGTCGCCACGT  
CCAGCAAAGCCCAGGCTGCAATGTGGCCATCTGGGCCCTGGCCTCTGTTGTCGGTGTCCCGTTGCCAT  
CATGGGCTCGGCACAGGTCGAGGATGAAGAGATCGAGTGCCTGGTGGAGATCCCTACCCCTCAGGATTAC  
TGGGGCCCGGTGTTTGCCATCTGCATCTTCTCTTCTCCTTCATCGTCCCGTGCCTCATCTCTGTCT  
GCTACAGCCTCATGATCCGGCGGCTCCGTGGAGTCCGCTGCTCTCGGGTCCCAGAGAGAAGGACCGGAA  
CCTGCGGCGCATCACTCGGCTGGTGTGGTGGTAGTGGCTGTGTTCGTGGGCTGCTGGACGCTGTCCAG  
GTCTTCGTGCTGGCCCAAGGGCTGGGGTTTCAGCCGAGCAGCAGACTGCCGTGGCCATTCCTGCGCTTCT  
GCACGGCCCTGGGCTACGTCAACAGCTGCCTCAACCCCATCCTCTACGCCTTCTGGATGAGAACTTCAA  
GGCCTGCTTCCGCAAGTTCTGCTGTGCATCTGCCCTGCGCCGGGACGTGCAGGTGCTGACCGCGTGC  
AGCATTGCCAAGGACGTGGCCCTGGCCTGCAAGACCTCTGAGACGGTACCGCGGCCCGCA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG212937 representing NM\_000913  
 Red=Cloning site Green=Tags(s)

MEPLFPAPFWEVIYGSHLQGNLSLLSPNHSLPPHLLLNASHGAFPLGLKVTIVGLYLAVCVGGLLGNC  
 LVMYVILRHTKMKATNIYIFNLALADTLVLLTLPFQGDILLGFWPFGNALCKTVIAIDYYNMFTSTFT  
 LTAMSVDRYVAICHPIRALDVRTSSKAQAVNVAIWALASVVGVPVAIMGSAQVEDEEIECLVEIPTPDY  
 WGPVFAICIFLFSFIVPVLVISVCYSLMIRRLRGVRLLSGSREKDRNLRRITRLVLVVAVFVGCWTPVQ  
 VFVLAQGLGVQPSSETAVAILRFCTALGYVNSCLNPILYAFLDENFKACFRKFCCASALRRDVQVSDRVR  
 SIAKDVALACKTSETVPRPA

TRTRPLE - GFP Tag - V

**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

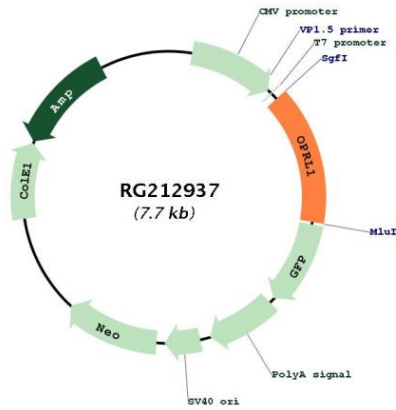
**Domains:** 7tm\_1

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

**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 RG212937