

Product datasheet for **RG206589**

Nociceptin receptor (OPRL1) (NM_182647) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nociceptin receptor (OPRL1) (NM_182647) 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:	>RG206589 representing NM_182647 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCCTCTCCCCGCGCGTTCTGGGAGGTTATCTACGGCAGCCACCTTCAGGGCAACCTGTCCC
TCCTGAGCCCAACCACAGTCTGCTGCCCCGCATCTGCTGCTCAATGCCAGCCACGGCGCCTTCTGCC
CCTCGGGCTCAAGGTCACCATCGTGGGGCTCTACCTGGCCGTGTGTGTCGGAGGGCTCCTGGGAACTGC
CTTGTCATGTACGTCATCCTCAGGCACACAAAATGAAGACAGCCACCAATATTTACATCTTTAACCTGG
CCCTGGCCGACACTCTGGTCTGCTGACGCTGCCCTTCCAGGGCACGGACATCCTCCTGGGCTTCTGGCC
GTTTGGGAATGCGCTGTGCAAGACAGTCATTGCCATTGACTACTACAACATGTTACCAGCACCTTACC
CTAACTGCCATGAGTGTGGATCGTATGTAGCCATCTGCCACCCATCCGTGCCCTCGACGTCGGCACGT
CCAGCAAAGCCCAGGCTGCAATGTGGCCATCTGGGCCCTGGCCTCTGTTGTCGGTGTCCCGTTGCCAT
CATGGGCTCGGCACAGGTCGAGGATGAAGAGATCGAGTGCCTGGTGGAGATCCCTACCCCTCAGGATTAC
TGGGGCCCGGTGTTTGCCATCTGCATCTTCTCTTCTCCTTCATCGTCCCGTGCCTCATCTCTGTCT
GCTACAGCCTCATGATCCGGCGGCTCCGTGGAGTCCGCTGCTCTCGGGTCCCAGAGAGAAGGACCGGAA
CCTGCGGGCATCACTCGGCTGGTGTGGTGGTAGTGGCTGTGTTCGTGGGCTGCTGGACGCCTGTCCAG
GTCTTCGTGCTGGCCCAAGGGCTGGGGTTTCAGCCGAGCAGCAGACTGCCGTGGCCATTCTGCGCTTCT
GCACGGCCCTGGGCTACGTCAACAGCTGCCTCAACCCCATCCTCTACGCCTTCTGGATGAGAACTTCAA
GGCCTGCTTCCGCAAGTTCTGCTGTGCATCTGCCCTGCGCCGGGACGTGCAGGTGCTGACCGCGTGGC
AGCATTGCCAAGGACGTGGCCCTGGCCTGCAAGACCTCTGAGACGGTACCGGGCCCGCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG206589 representing NM_182647
 Red=Cloning site Green=Tags(s)

MEPLFPAPFWEVIYGSHLQGNLSLLSPNHSLPPHLLLNASHGAFPLPLGLKVTIVGLYLAVCVGGLLGNC
 LVMYVILRHTKMKATNIYIFNLALADTLVLLTLPFQGTDILLGFWPFGNALCKTVIAIDYYNMFTSTFT
 LTAMSVDRYVAICHPIRALDVRTSSKAQAVNVAIWALASVVGVPVAIMGSAQVEDEEIECLVEIPTPDY
 WGPVFAICIFLFSFIVPVLVISVCYSLMIRRLRGVRLLSGSREKDRNLRRITRLVLVVAVFVGCWTPVQ
 VFVLAQGLGVQPSSETAVAILRFCTALGYVNSCLNPILYAFLDENFKACFRKFCCASALRRDVQVSDRVR
 SIAKDVALACKTSETVPRPA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_182647

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_182647.4](#)

RefSeq Size: 3359 bp

RefSeq ORF: 1113 bp

Locus ID: 4987

UniProt ID: [P41146](#)

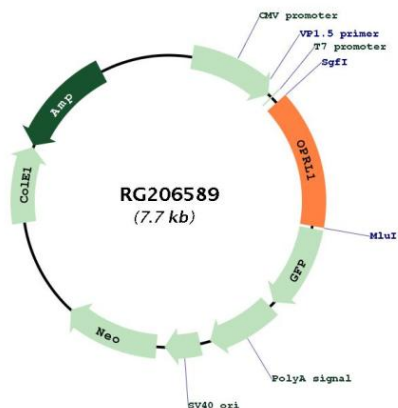
Cytogenetics: 20q13.33

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 RG206589