OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC109521

Nociceptin receptor (OPRL1) (NM_000913) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nociceptin receptor (OPRL1) (NM_000913) Human Untagged Clone
Tag:	Tag Free
Symbol:	Nociceptin receptor
Synonyms:	KOR-3; KOR3; NOCIR; NOP; NOPr; OOR; OPRL; ORL1; PNOCR
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC109521 sequence for NM_000913 edited (data generated by NextGen Sequencing)

```
ATGGAGCCCCTCTTCCCCGCGCCGTTCTGGGAGGTTATCTACGGCAGCCACCTTCAGGGC
AACCTGTCCCTCCTGAGCCCCAACCACAGTCTGCTGCCCCCGCATCTGCTGCTCAATGCC
AGCCACGGCGCCTTCCTGCCCCTCGGGCTCAAGGTCACCATCGTGGGGCTCTACCTGGCC
GTGTGTGTCGGAGGGCTCCTGGGGAACTGCCTTGTCATGTACGTCATCCTCAGGCACACC
AAAATGAAGACAGCCACCAATATTTACATCTTTAACCTGGCCCTGGCCGACACTCTGGTC
CTGCTGACGCTGCCCTTCCAGGGCACGGACATCCTCCTGGGCTTCTGGCCGTTTGGGAAT
GCGCTGTGCAAGACAGTCATTGCCATTGACTACTACAACATGTTCACCAGCACCTTCACC
CTAACTGCCATGAGTGTGGATCGCTATGTAGCCATCTGCCACCCCATCCGTGCCCTCGAC
GTCCGCACGTCCAGCAAAGCCCAGGCTGTTAATGTGGCCATCTGGGCCCTGGCCTCTGTT
GTCGGTGTTCCCGTTGCCATCATGGGCTCGGCACAGGTCGAGGATGAAGAGATCGAGTGC
CTGGTGGAGATCCCTACCCCTCAGGATTACTGGGGCCCGGTGTTTGCCATCTGCATCTTC
CTCTTCTCCTTCATCGTCCCCGTGCTCGTCATCTCTGTCTGCTACAGCCTCATGATCCGG
CGGCTCCGTGGAGTCCGCCTGCTCTCGGGCTCCCGAGAGAAGGACCGGAACCTGCGGCGC
ATCACTCGGCTGGTGCTGGTGGTAGTGGCTGTGTTCGTGGGCTGCTGGACGCCTGTCCAG
GTCTTCGTGCTGGCCCAAGGGCTGGGGGTTCAGCCGAGCAGCGAGACTGCCGTGGCCATT
CTGCGCTTCTGCACGGCCCTGGGCTACGTCAACAGCTGCCTCAACCCCATCCTCTACGCC
TTCCTGGATGAGAACTTCAAGGCCTGCTTCCGCAAGTTCTGCTGTGCATCTGCCCTGCGC
CGGGACGTGCAGGTGTCTGACCGCGTGCGCAGCATTGCCAAGGACGTGGCCCTGGCCTGC
AAGACCTCTGAGACGGTACCGCGGCCCGCATGA

Clone variation with respect to NM_000913.4
510 c=>t
```


View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000913 unedited
ATTTATGTATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGGTCTGCTGAGAA
GATCCTCTTCTACCCTGCTCTGCACCTGTGCTCGACTGCCAGCCGGCTGAGGGCGGGGGT
CTCCACGGTGGTCCCAGCTCCCAAGGAGGTTGCAGAAGTACCGTACAGAGTGGATTTGCA
GGGCAGTGGCATGGAGCCCCTCTTCCCCGCGCCGTTCTGGGAGGTTATCTACGGCAGCCA
CCTTCAGGGCAACCTGTCCCTCCTGAGCCCCAACCACAGTCTGCTGCCCCCGCATCTGCT
GCTCAATGCCAGCCACGGCGCCTTCCTGCCCCTCGGGCTCAAGGTCACCATCGTGGGGCT
CTACCTGGCCGTGTGTGTCGGAGGGCTCCTGGGGAACTGCCTTGTCATGTACGTCATCCT
CAGGCACACCAAAATGAAGACAGCCACCAATATTTACATCTTTAACCTGGCCCTGGCCGA
CACTCTGGTCCTGCTGACGCTGCCCTTCCAGGGCACGGACATCCTCCTGGGCTTCTGGCC
GTTTGGGAATGCGCTGTGCAAGACAGTCATTGCCATTGACTACTACAACATGTTCACCAG
CACCTTCACCCTAACTGCCATGAGTGTGGATCGCTATGTAGCCATCTGCCACCCCATCCG
TGCCCTCGACGTCCGCACGTCCAGCAAAGCCCAGGCTGTTAATGTGGCCATCTGGGCCCT
GGCCTCTGTTGTCGGTGTTCCCGTTGCCATCATGGGCTCGGCACAGGTCGAGGATGAAGA
GATCGAGTGCCTGGTGGAGATCCCTACCCCTCAGGATTACTGGGGCCCGNTGTTNGNCAT
CTGCATCTTTCTCTTCTNCTTCATCGNCCCCGNGCTCGTCATCTCTGTCTGCTACAGCCT
CATGATCCGGCGGGCTCGTGGNAGTCGNCTGCTCTCGGGCTTCCGAGAGAAGGACCGGAA
CCTGCGNGCATCACTCGCTGGNTGCTGTGTAGTGGCT

3' Read Nucleotide Sequence:

>Reverse primer walk for NM_000913 unedited
CCCCCCCCAATACTCTGTGTTGGGCCGTAAGAGGGTCTCAACCTACTGCACAGCCACATA
AGGNCAGGTCCACGCCTAGTCATGCGGGCCGCGGTACCGTCTCAGAGGTCTTGCAGGCCA
GGGCCACGTCCTTGGCAATGCTGCGCACGCGGTCAGACACCTGCACGTCCCGGCGCAGGG
CAGATGCACAGCAGAACTTGCGGAAGCAGGCCTTGAAGTTCTCATCCAGGAAGGCGTAGA
GGATGGGGTTGAGGCAGTTGTTGACGTAGCCCAGGGCCGTGCAAAAGCGCAGAATGGCCA
CGGCAGTCTCGTTGTTCGGCTGAACCCCCAGCCCTTGGGCCAGCACGAAGACCTGGACAG
GCGTTCAGCAGCCCACGAACACAGTCACTACCACCAGCACCAGCCGAGTGATGCGCCGCA
GGTTCCGGTCCTTCTCTCGGGAGCCCGAGAGCAGGCGGACTCCACGGAGCCGCCGGATCA
TGAGGCTGTAGCAGACAGAGATGACGAGCACGGGGACGATGAAGGAGAAGAGGAAGATGC
AGATGGCAAACACCGGGCCCCAGTAATCCTGAGGGGTAGGGATCTCCACCAGGCACTNGA
TCTNTTCATCCTCGACCTGTGCCGAGCCCATGAGGGCAACGGGAACACCGACAACAGAGG
CCAGGGCCCAGATGGCCACATTAACAGCCTGTGCTTTGNTGGACGTGCGGACTTCNAGGG
CACGGATGGGGTGGNANATGGCTACATAGCGACCCACACTCATGGCAGTTAGGGTGAAGG
TGCTGGTGAACATGTTGTNATAGTCAATGGCAATGACTGTTTTGGACAGTGCATTCCCAA
ACGCCAAAGCCCAGGAGTATGTCCTTGCCCTGAAGGGCAGCGTCAGCAGGACCAGAGTGC

Restriction Sites: NotI-NotI

ACCN: NM_000913

Insert Size: 3500 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_000913.3, NP_000904.1

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]
Transcript Variant: This variant (2) lacks an exon in the 5' non-coding region; therefore, has a shorter 5' UTR compared to variant 1. Variants 1, 2, and 3 encode the same isoform (1).