

Product datasheet for SC309317

Nociceptin receptor (OPRL1) (NM_182647) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nociceptin receptor (OPRL1) (NM_182647) Human Untagged Clone
Tag:	Tag Free
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)
Fully Sequenced ORF:	>SC309317 representing NM_182647. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**
 ATGGAGCCCTCTTCCCGCGCGTTCTGGGAGTTATCTACGGCAGCCACCTTCAGGGCAACCTGTCC
 CTCCTGAGCCCAACCACAGTCTGCTGCCCGCATCTGCTCAATGCCAGCCACGGCGCCTTCTG
 CCCCTCGGGCTCAAGGTCAACATCGTGGGGCTCTACCTGGCCGTGTGTGTCGGAGGGCTCCTGGGAAC
 TGCCTTGTCATGTACGTCATCCTCAGGCACACCAAAATGAAGACAGCCACCAATATTACATCTTTAAC
 CTGGCCCTGGCCGACACTCTGGTCTGTGACGCTGCCCTTCAGGGCACGGACATCCTCCTGGGCTTC
 TGGCCGTTTGGGAATGCGCTGTGCAAGACAGTCATTGCCATTGACTACTACAACATGTTACCAGCACC
 TTCACCTAACTGCCATGAGTGTGGATCGCTATGTAGCCATCTGCCACCCCATCCGTGCCCTCGACGTC
 CGCACGTCCAGCAAAGGCCAGGCTGTCAATGTGGCCATCTGGGCCCTGGCCTCTGTTGTCGGTGTTCCT
 GTTGCCATCATGGGCTCGGCACAGGTCGAGGATGAAGAGATCGAGTGCCTGGTGGAGATCCCTACCCCT
 CAGGATTACTGGGGCCCGGTGTTTGCCATCTGCATCTTCTCTTCTCCTTCATCGTCCCCGTGCTCGTC
 ATCTCTGTCTGTACAGCCTCATGATCCGGCGGCTCCGTGGAGTCCGCCTGCTCTCGGGCTCCCGAGAG
 AAGGACCGGAACCTGCGGCGCATCACTCGGCTGGTGTGGTGGTAGTGGCTGTGTTCTGTTGGGCTGCTGG
 ACGCCTGTCCAGGTCTTCGTGCTGGCCCAAGGGCTGGGGTTACGCCGAGCAGCAGACTGCCGTGGCC
 ATTCTGCGCTTCTGCACGGCCCTGGGCTACGTCAACAGCTGCCTCAACCCCATCCTCTACGCCTTCCTG
 GATGAGAACTTCAAGGCCTGCTTCGCAAGTTCTGCTGTGCATCTGCCCTGCGCCGGGACGTGCAGGTG
 TCTGACCGCTGCGCAGCATTGCCAAGGACGTGGCCCTGGCCTGCAAGACCTCTGAGACGGTACCGCGG
 CCCG**CATGA**
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI


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ACCN:	NM_182647
Insert Size:	1113 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	<u>NM_182647.3</u>
RefSeq Size:	3427 bp
RefSeq ORF:	1113 bp
Locus ID:	4987
UniProt ID:	<u>P41146</u>
Cytogenetics:	20q13.33
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
MW:	40.7 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]

Transcript Variant: This variant (1) represents the longest transcript and encodes two isoforms, which result from the use of alternative in-frame translation termination codons. The shorter isoform (1) results from translation termination at the upstream UGA stop codon, while the longer isoform (1x) results from UGA stop codon readthrough to the downstream UAG termination codon. This RefSeq represents the shorter isoform (1). Variants 1, 2, and 3 encode the same isoform (1).