

#### **OriGene Technologies, Inc.**

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# Product datasheet for SC119609

### Mu Opioid Receptor (OPRM1) (NM\_000914) Human Untagged Clone

## **Product data:**

Product Type:	Expression Plasmids
Product Name:	Mu Opioid Receptor (OPRM1) (NM_000914) Human Untagged Clone
Tag:	Tag Free
Symbol:	Mu Opioid Receptor
Synonyms:	LMOR; M-OR-1; MOP; MOR; MOR1; OPRM
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_000914 edited ATGGACAGCAGCGCTGCCCCCACGAACGCCAGCAATTGCACTGATGCCTTGGCGTACTCA AGTTGCTCCCCAGGACCCAGCCCGGTTCCTGGGTCAACTTGTCCCACTTAGATGGCAAC CTGTCCGACCCATGCGGTCCGAACGCACCGACCGGGCGGG
<b>Restriction Sites:</b>	Please inquire
ACCN:	NM_000914
Insert Size:	1700 bp



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	u Opioid Receptor (OPRM1) (NM_000914) Human Untagged Clone – SC119609
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <u>custsupport@origene.com</u> or by calling 301.340.3188 option 3 for pricing and delivery.
	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. <u>More info</u>
OTI Annotation:	The ORF of this clone has been fully sequenced and found to be a perfect match to NM_000914.2.
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 Meth	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
RefSeq:	<u>NM 000914.2, NP 000905.3</u>
RefSeq Size:	1891 bp
RefSeq ORF:	1203 bp
Locus ID:	4988
UniProt ID:	<u>P35372</u>
Cytogenetics:	6q25.2
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction

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This gene encodes one of at least three opioid receptors in humans; the mu opioid receptor Gene Summary: (MOR). The MOR is the principal target of endogenous opioid peptides and opioid analgesic agents such as beta-endorphin and enkephalins. The MOR also has an important role in dependence to other drugs of abuse, such as nicotine, cocaine, and alcohol via its modulation of the dopamine system. The NM 001008503.2:c.118A>G allele has been associated with opioid and alcohol addiction and variations in pain sensitivity but evidence for it having a causal role is conflicting. Multiple transcript variants encoding different isoforms have been found for this gene. Though the canonical MOR belongs to the superfamily of 7transmembrane-spanning G-protein-coupled receptors some isoforms of this gene have only 6 transmembrane domains. [provided by RefSeq, Oct 2013] Transcript Variant: This variant (MOR-1) represents use of an alternate promoter and 5' UTR and uses a downstream start codon, compared to variant MOR-1i. The resulting isoform (MOR-1) has a shorter N-terminus, compared to isoform MOR-1i. An in-frame, upstream AUG is present that would extend the N-terminus by 62-aa, but the longer N-terminus is not annotated to conform to the annotation commonly used in the literature. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.