

Product datasheet for **RC238549**

Mu Opioid Receptor (OPRM1) (NM_001285524) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mu Opioid Receptor (OPRM1) (NM_001285524) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mu Opioid Receptor
Synonyms:	LMOR; M-OR-1; MOP; MOR; MOR1; OPRM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC238549 representing NM_001285524
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGTTTGCACAGAAGAGTGCCAGTGAAGAGACCTACTCCTTGATCGCTTTGCGCAAAATCCACCCC
 TTTTCCCTCCTCCCTCCCTCCAGCCTCCGAATCCCGCATGGCCACGCTCCCCTCCTGCAGCGGTGCGG
 GGCAGCCAGGACTGGTTTCTGTAAAGAAACAGCAGGAGCTGTGGCAGCGGCGAAAGGAAGCGGCTGAGGCG
 CTTGGAACCCGAAAAGTCTCGGTGCTCCTGGTACCTCGCACAGCGGTGCCCGCCGCGGCTCAGTACCA
 TGGACAGCAGCGCTGCCCCACGAACGCCAGCAATTGCACTGATGCCTTGGCGTACTCAAGTTGCTCCCC
 AGCACCCAGCCCCGGTCTCGGTCAACTTGTCCCACTTAGATGGCAACCTGTCCGACCCATGCGGTCCG
 AACCGCACCGACTGGGCGGGAGAGACAGCCTGTGCCCTCCGACCGGCAGTCCCTCCATGATCACGGCCA
 TCAGGATCATGGCCCTACTCCATCGTGTGCGTGGTGGGGCTCTTCGAAACTTCTGGTCATGTATGT
 GATTGTACAGATACCAAGATGAAGACTGCCACCAACATCTACATTTTCAACCTTGTCTGGCAGATGCC
 TTAGCCACCAAGTACCCTGCCCTCCAGAGTGTGAATTACCTAATGGGAACATGGCCATTTGGAACCATCC
 TTTGCAAGATAGTGATCTCCATAGATTACTATAACATGTTCAACAGCATATTCACCTCTGCACCATGAG
 TGTTGATCGATACATTGCAGTCTGCCACCTGTCAAGGCCTTAGATTTCCGTAATGTTTCATGGCTACAACA
 AATACAGGCAAGGTTCCATAGATTGTACTAACAATCTCTCATCAACCTGGTACTGGGAAAACCTGCT
 GAAGATCTGTGTTTTATCTTCGCTTCAATGAGCAGTGTCTCATACCTGACTGGGAAAACCTGCT
 ATCTTGGCCTCAAGAGTGTCCGCATGCTCTCTGGCTCAAAGAAAAGGACAGGAATCTTGAAGGATCA
 CCAGGATGGTGTGGTGGTGGTGTGTTTCTGCTGGTCCAAAGAAAAGGACAGGAATCTTGAAGGATCA
 TAAAGCCTTGGTTACAATCCAGAAACTACGTTCCAGACTGTTTCTTGGCACTTCTGCATTGCTTAGGT
 TACAAAAACAGCTGCCTCAACCCAGTCTTTATGCATTCTGGATGAAAACCTTCAACAGATGCTTCAGAG
 AGTTCTGTATCCCAACCTCTTCAACATTGAGCAACAAAACCTCCACTCGAATTCGTGAGAACACTAGAGA
 CCACCCCTCCACGGCCAATACAGTGGATAGAATAATCATCAGCTAGAAAATCTGGAAGCAGAACTGCT
 CCGTTGCC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238549 representing NM_001285524
 Red=Cloning site Green=Tags(s)

MCLHRRVPSEETYSLDRFAQNPPLFPPPSLPASESRMAHAPLLQRCGAARTGFCKKQQLWQRRKEAAEA
 LGTRKVSVLLATSHSGARPAVSTMDSSAAPTNASNCTDALAYSSCSPAPSPGSWVNLSHLDGNLSDPCGP
 NRTDLGGRDSLCPPTGSPSMITAITIMALYSIVCVVGLFGNFLVMYVIVRYTKMKTATNIYIFNLALADA
 LATSTLFPQSVNYLMGTWPFGTILCKIVISIDYNNMFTSIFTLCTMSVDRYIAVCHPVKALDFRTPRNAK
 IINVCNWILSSAIGLPVMFMATTKYRQGSIDCTLTFSHPTWYWENLLKICVFIFAFIMPVLIITVICYGLM
 ILRLKSVRMLSGSKEKDRNLRRITRMVLVVAVFIVCWTPIHIIYVIKALVTIPETTFQTVSWHFCIALG
 YTNSCLNPVLYAFLDENFKRCRFRECIPTSSNIEQQNSTRIRQNTRDHPSTANTVDRTNHQLENLEAETA
 PLP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8063_c10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001285524

ORF Size: 1479 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_001285524.1](#), [NP_001272453.1](#)

RefSeq Size: 15174 bp

RefSeq ORF: 1482 bp

Locus ID: 4988

UniProt ID: [P35372](#)

Cytogenetics: 6q25.2

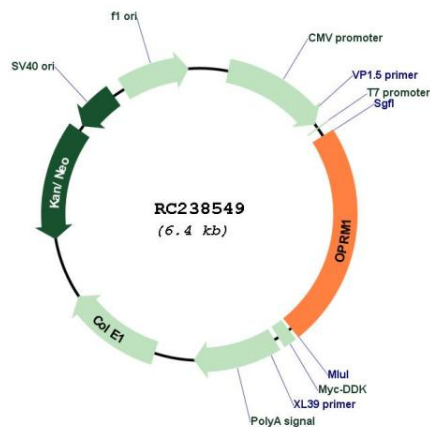
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

MW: 55 kDa

Gene Summary: This gene encodes one of at least three opioid receptors in humans; the mu opioid receptor (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 7-transmembrane-spanning G-protein-coupled receptors some isoforms of this gene have only 6 transmembrane domains. [provided by RefSeq, Oct 2013]

Product images:



Circular map for RC238549