

Product datasheet for **MC227386**

Oprk1 (NM_001204371) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Oprk1 (NM_001204371) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Oprk1
Synonyms:	K-OR-1; KOR; KOR-1; MSL-1; Op; Oprk2; R2; R21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC209123 representing NM_011011 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGTCCCCATTGAGATCTCCGAGGAGATCCAGGCCCTACCTGCTCTCCAGTGCTTGCCTTCTCC
CCAACAGCAGCTTTGGTTCCCAACTGGGCAGAAATCCGACAGTAATGGCAGTGTGGGCTCAGAGGATCA
GCAGCTGGAGTCCGCGCACATCTCCGGCCATCCCTGTTATCATCACCGCTGTCTACTCTGTGGTATTT
GTGGTGGGCTTAGTGGCAATTCTGTGTCATGTTTGTATCATCCGATACACGAAGATGAAGACCGCAA
CCAACATCTACATATTTAACCTGGCTTTGGCAGATGCTTTGGTTACTACCACTATGCCCTTTCAGAGTGC
TGCTACTTGATGAATCTTGGCCTTTGGAGATGTGCTATGCAAGATTGCATTTCCATTGACTACTAC
AACATGTTTACCAGCATATTCACCTTGACCATGATGAGTGTGGACCGCTACATTGCTGTGTGCCACCTG
TGAAAGCTTTGGACTTCCGAACACCTTTGAAAGCAAAGATCATCAACATCTGCATTTGGCTCCTGGCATC
ATCTGTTGGTATATCAGCGATAGTCCTTGGAGGCACCAAAGTCAGGGAAGATGTGGATGTCATTGAATGC
TCCTTGCAAGTTTCTGATGATGAATATTCCTGGTGGGATCTTTCATGAAGATCTGTGTCTTCGCTTTG
CCTTTGTGATCCAGTCCATCATCATTGTCTGCTACACCCTGATGATCCTGCGCCTGAAGAGTGTCCG
GCTCCTGTCTGGCTCCCGAGAGAAGGACCGAAATCTCCGCCGATCACCAGCTGGTGTGGTAGTAGTT
GCAGTCTTCATCATCTGTTGGACCCCATTCACATCTTTATCCTGGTGGAGGCTCTGGGAAGCACCTCCC
ACAGCACAGCTGCCCTCTCCAGCTATTATTTCTGTATTGCTTGGGTTATACCAACAGCAGCCTGAATCC
TGTTCTCTATGCCTTTCTGGATGAAAATCAAGCGGTGTTTTAGGGACTTCTGCTTCCCTATTAAGATG
CGAATGGAGCGCCAGAGCACCAATAGAGTTAGAAACACAGTTCAGGATCCTGCTCCATGAGAGATGTGG
GAGGGATGAATAAGCCAGT**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001204371
Insert Size:	1143 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:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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_001204371.1</u> , <u>NP_001191300.1</u>
RefSeq Size:	4707 bp
RefSeq ORF:	1143 bp
Locus ID:	18387
UniProt ID:	<u>P33534</u>
Cytogenetics:	1 1.89 cM

Gene Summary:

This gene encodes an opioid receptor, which is a member of the 7 transmembrane-spanning G protein-coupled receptor family. It functions as a receptor for endogenous ligands, as well as a receptor for various synthetic opioids. Ligand binding results in inhibition of adenylate cyclase activity and neurotransmitter release. This opioid receptor plays a role in the perception of pain and mediating the hypolocomotor, analgesic and aversive actions of synthetic opioids. Variations in this gene have also been associated with alcohol dependence and opiate addiction. Alternatively spliced transcript variants have been found 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 longer 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 UGA termination codon. This RefSeq represents the shorter isoform (1). Variants 1 and 2 encode the same isoform.