

Product datasheet for MR229597

Oprk1 (NM_001204371) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Oprk1 (NM_001204371) Mouse Tagged ORF Clone
Tag: Myc-DDK
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)
ORF Nucleotide Sequence: >MR229597 representing NM_001204371
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGTCCCCATTCCAGATCTTCCGAGGAGATCCAGGCCCTACCTGCTCTCCAGTGCTTGCCTTCTCC
 CCAACAGCAGCTTTGGTCCCAACTGGGCAGAAATCCGACAGTAATGGCAGTGTGGGCTCAGAGGATCA
 GCAGCTGGAGTCCGCGCACATCTCTCCGGCCATCCCTGTTATCATCACCGCTGTCTACTCTGTGGTATTT
 GTGGTGGGCTTAGTGGCAATTCTCTGGTCATGTTTGTTCATCATCCGATACACGAAGATGAAGACCGCAA
 CCAACATCTACATATTTAACCTGGCTTTGGCAGATGCTTTGGTTACTACCACTATGCCCTTTCAGAGTGC
 TGCTACTTGATGAATCTTGGCCTTTGGAGATGTGCTATGCAAGATTGCATTTCCATTGACTACTAC
 AACATGTTTACCAGCATATTCACCTTGACCATGATGAGTGTGGACCGCTACATTGCTGTGTGCCACCTG
 TGAAAGCTTTGGACTTCCGAACACCTTTGAAAGCAAAGATCATCAACATCTGCATTTGGCTCCTGGCATC
 ATCTGTTGGTATATCAGCGATAGTCCTTGGAGGCACCAAAGTCAGGGAAGATGTGGATGTCATTGAATGC
 TCCTTGCAGTTTCTGATGATGAATATTCCTGGTGGGATCTTTCATGAAGATCTGTGTCTTCGCTTTG
 CCTTTGTGATCCAGTCCCTCATCATATTGTCTGCTACACCCTGATGATCCTGCGCCTGAAGAGTGTCCG
 GCTCCTGTCTGGCTCCCAGAGAAGGACCGAAATCTCCGCCGATCACCAGCTGGTGTGGTAGTAGTT
 GCAGTCTTCATCATCTGTTGGACCCCATTCACATCTTTATCCTGGTGGAGGCTCTGGAAGCACCTCCC
 ACAGCACAGCTGCCCTCTCCAGCTATTATTTCTGTATTGCTTGGGTTATACCAACAGCAGCCTGAATCC
 TGTTCTCTATGCCTTTCTGGATGAAAACCTCAAGCGGTGTTTTAGGGACTTCTGCTTCCCTATTAAGATG
 CGAATGGAGCGCCAGAGCACCAATAGAGTTAGAAACACAGTTCAGGATCCTGCTCCATGAGAGATGTGG
 GAGGGATGAATAAGCCAGTA

ACGGTACGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229597 representing NM_001204371
Red=Cloning site Green=Tags(s)

MESPIQIFRGGDPGPTCPSACLIPNSSSWFPNWAESDSNGSVGSEDQQLES AHISPAIPVITAVYSVVF
 VVGLVGNLSVMFVIIRYTKMKTATNIYIFNLALADALVTTMPFQSAVYLMNSWPFQDVLCKIVISIDYY
 NMFTSIFTLTMSVDRIYAVCHPVKALDFRTPKAKIINICIWLLASSVGISAIVLGGTKVREDVDVIEC
 SLQFPDDEYSWDLFMKICVVFVAFVIPVLIIIVCYTLMILRLKSVRLLSGSREKDRNLRRITKLVVVV
 AVFIICWTPIHIFILVEALGSTSHSTAALSSYYFCIALGYTNSSLNPVLYAFLDENFKRCFRDFCFPIKM
 RMERQSTNRVNTVQDPASMRDVGGMNKPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001204371

ORF Size: 1140 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_001204371.1](#), [NP_001191300.1](#)

RefSeq Size: 4707 bp

RefSeq ORF: 1143 bp

Locus ID: 18387

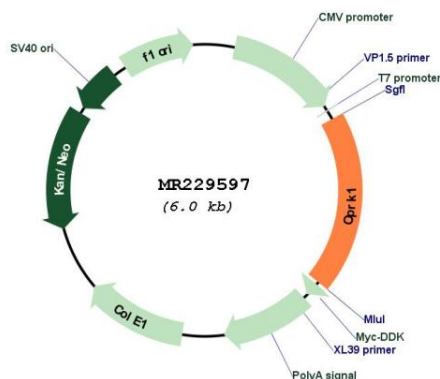
UniProt ID: [P33534](#)

Cytogenetics: 1 1.89 cM

MW: 42.7 kDa

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]

Product images:



Circular map for MR229597