

## Product datasheet for RC237232

### Kappa Opioid Receptor (OPRK1) (NM\_001282904) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kappa Opioid Receptor (OPRK1) (NM_001282904) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OPRK1
Synonyms:	K-OR-1; KOP; KOR; KOR-1; KOR1; OPRK
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC237232 representing NM_001282904 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAAGACAGCAACCAACATTTACATATTTAACCTGGCTTTGGCAGATGCTTTAGTTACTACAACCATGC  
CCTTTTCAGAGTACGGTCTACTTGATGAATTCCTGGCCTTTGGGGATGTGCTGTGCAAGATAGTAATTTTC  
CATTGATTACTACAACATGTTCCACGAGCATCTTACCTTGACCATGATGAGCGTGGACCGCTACATTGCC  
GTGTGCCACCCCGTGAAGGCTTTGGACTCCGCACACCCTTGAAGGCAAAGATCATCAATATCTGCATCT  
GGCTGCTGTCGTCATCTGTTGGCATCTCTGCAATAGTCCTTGGAGGCACCAAAGTCAGGGAAGACGTCGA  
TGTCATTGAGTGTCTCTGCAGTCCCAGATGATGACTACTCCTGGTGGGACCTCTTCATGAAGATCTGC  
GTCTTCATCTTTGCCTTCGTGATCCCTGTCTCATCATCATCGTCTGCTACACCCTGATGATCCTGCGTC  
TCAAGAGCGTCCGGCTCCTTTCTGGCTCCCGAGAGAAAGATCGCAACCTGCGTAGGATCACCAGACTGGT  
CCTGGTGGTGGTGGCAGTCTTCGTGCTGCTGGACTCCCATTACATATTCATCCTGGTGGAGGCTCTG  
GGGAGCACCTCCCACAGCACAGTGTCTCTCCAGCTATTACTTCTGCATCGCCTTAGGCTATACCAACA  
GTAGCCTGAATCCCATTCTCTACGCTTTCTTGATGAAAACCTCAAGCGGTGTTTCCGGGACTTCTGCTT  
TCCAATGAAGATGAGGATGGAGCGGCAGAGCACTAGCAGAGTCCGAAATACAGTTCAGGATCCTGCTTAC  
CTGAGGGACATCGATGGGATGAATAAACAGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC237232 representing NM\_001282904  
 Red=Cloning site Green=Tags(s)

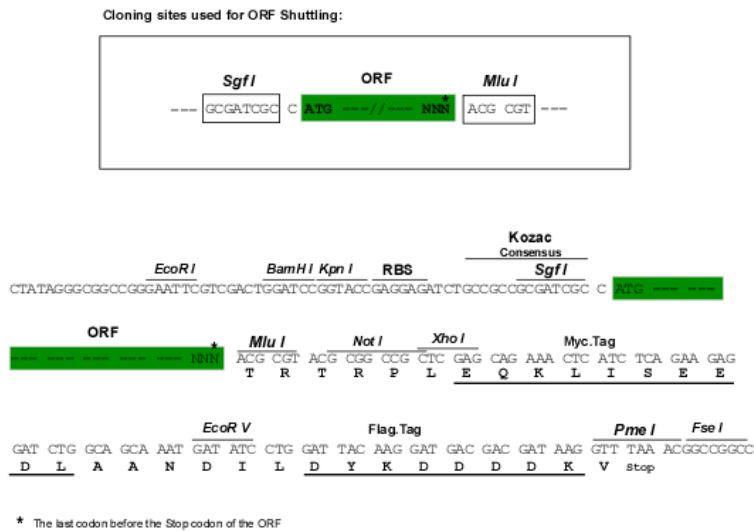
MKTATNIYIFNLALADALVTTTTPFQSTVYLMNSWPFQDVLCKIVISIDYNNMFTSIFTLTMSVDRYIA  
 VCHPVKALDFRTPKAKIINICIWLLSSVSGISAIVLGGTKVREDVDVIECSLQFPDDYSWDLFMKIC  
 VFIFAFVIVLIIIVCYTLMILRLKSVRLLSGSREKDRNLRRITRLVLVVAVFVVCWTPPIHIFILVEAL  
 GSTSHSTAALSSYFICIALGYTNSLNPILYAFLDENFKRCFRDFCFPLKMRMERQSTSRVRNTVQDPAY  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

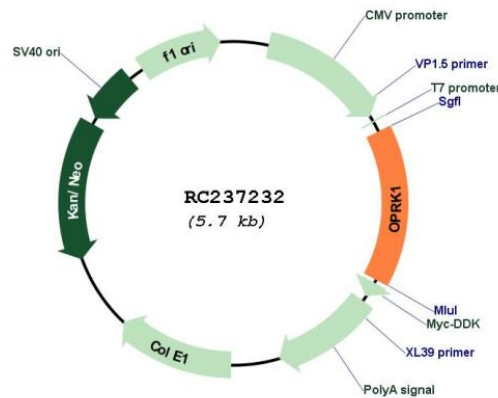
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001282904

**ORF Size:** 873 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001282904.1</a> , <a href="#">NP_001269833.1</a>
<b>RefSeq Size:</b>	5196 bp
<b>RefSeq ORF:</b>	876 bp
<b>Locus ID:</b>	4986
<b>UniProt ID:</b>	<a href="#">P41145</a>
<b>Cytogenetics:</b>	8q11.23
<b>Protein Families:</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways:</b>	Neuroactive ligand-receptor interaction
<b>MW:</b>	33.8 kDa
<b>Gene Summary:</b>	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 encoding different isoforms 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]