

Product datasheet for SC335126

OriGene Technologies, Inc.

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Kappa Opioid Receptor (OPRK1) (NM_001282904) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Kappa Opioid Receptor (OPRK1) (NM_001282904) Human Untagged Clone

Tag: Tag Free Symbol: OPRK1

Synonyms: K-OR-1; KOP; KOR; KOR-1; KOR1; OPRK

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001282904, the custom clone sequence may differ by one or

more nucleotides

Restriction Sites: Sgfl-Mlul

ACCN: NM 001282904

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).





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: <u>NM 001282904.1</u>, <u>NP 001269833.1</u>

 RefSeq Size:
 5196 bp

 RefSeq ORF:
 876 bp

 Locus ID:
 4986

 UniProt ID:
 P41145

 Cytogenetics:
 8q11.23

Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

Gene Summary: This gene encodes an opioid receptor, which is a member of the 7 transmembrane-spanning

transcript record were based on transcript alignments.

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]

Transcript Variant: This variant (2) contains an additional exon in the mid-region, which results in translation initiation at an in-frame downstream start codon compared to variant 1. The encoded isoform (2) has a shorter N-terminus compared to isoform 1. 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