

Product datasheet for RC214331

Sigma1 receptor (SIGMAR1) (NM_147157) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sigma1 receptor (SIGMAR1) (NM_147157) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Sigma1 receptor
Synonyms: ALS16; DSMA2; hSigmaR1; OPRS1; SIG-1R; sigma1R; SR-BP; SR-BP1; SRBP
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC214331 representing NM_147157
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCAGTGGGCCGTGGCCGGCGGTGGCGTGGCCGCGCTGCTCCTGGCTGTCGCAGCGGTGCTGACCC
 AGGTCGCTGGCTCTGGCTGGGTACGCAGAGCTTCGTCTCCAGCGGAAGAGATAGCGCAGTTGGCGCG
 GCAGTACGCTGGGCTGGACCACGAGCTGGCCTTCTCGTCTGATCGTGGAGCTGCGGGCGTGCACCCA
 GGCCACGTGCTGCCGACGAGGAGCTGCAGTGGGTGTTCTGTAATGCGGGTGGCTGGATGGCGCCATGT
 GCCTTCTGCACGCTCGCTGTCCGAGTATGTGCTGCTCTTCGGCACCGCCTTGGGCTCCCGGCCACTC
 GGGGAGACGGTAGTACACGGCCCTGGTGGAGCAACAGCTGTGGAGTGGGGGCAACACATGGATGGTG
 GAGTACGGCCGGGGCTCATCCATCCACCTGGCCTTCGCGCTGGCCGACACTGTCTTACGACCCAGG
 ACTTCTCACCTCTTCTATACTCTTCGCTCTATGCTCGGGCCTCCGGCTTGAGCTCACACCTACCT
 CTTTGGCCAGGACCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214331 representing NM_147157
 Red=Cloning site Green=Tags(s)

MQWAVGRRWAWALLLAVA AVL TQVVLWLGTQSFVFQREEIAQLARQYAGLDHELAFSRLIVELRRLHP
 GHVLPDEELQWVFNAGGWMGAMCLLHASLSEYVLLFGTALGSRGHSGETVVHGPGEATAVEWGPNTWMV
 EYGRGVIPSTLAFALADTVFSTQDFLTLFYTLRSYARGLRLELTTYLFGQDP

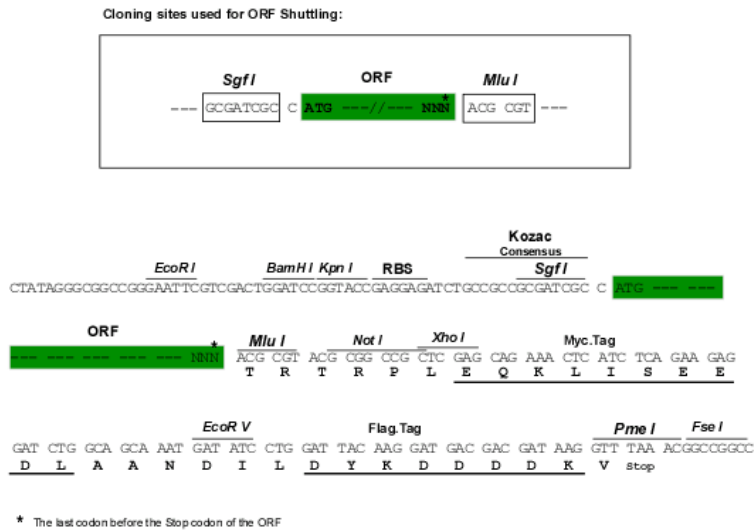
TRTRPLEQKLISEEDLAANDILDYKDDDDKV



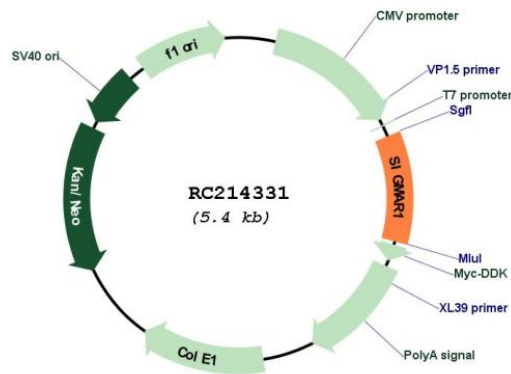
Chromatograms: https://cdn.origene.com/chromatograms/ja1451_f09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:

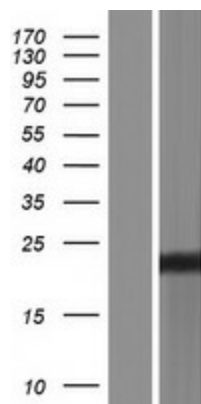


ACCN: NM_147157

ORF Size: 576 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:	<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:	NM_147157.2
RefSeq Size:	1580 bp
RefSeq ORF:	579 bp
Locus ID:	10280
UniProt ID:	Q99720
Cytogenetics:	9p13.3
Domains:	ERG2_Sigma1R
Protein Families:	Druggable Genome, GPCR, Transmembrane
MW:	21.3 kDa
Gene Summary:	This gene encodes a receptor protein that interacts with a variety of psychotomimetic drugs, including cocaine and amphetamines. The receptor is believed to play an important role in the cellular functions of various tissues associated with the endocrine, immune, and nervous systems. As indicated by its previous name, opioid receptor sigma 1 (OPRS1), the product of this gene was erroneously thought to function as an opioid receptor; it is now thought to be a non-opioid receptor. Mutations in this gene has been associated with juvenile amyotrophic lateral sclerosis 16. Alternative splicing of this gene results in transcript variants encoding distinct isoforms. [provided by RefSeq, Aug 2013]

Product images:

Western blot validation of overexpression lysate (Cat# [LY407820]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214331 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).