

Product datasheet for RC201206

OriGene Technologies, Inc.

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Sigma1 receptor (SIGMAR1) (NM_005866) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Sigma1 receptor (SIGMAR1) (NM_005866) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: SIGMAR1

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>RC201206 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC201206 protein sequence

Red=Cloning site Green=Tags(s)

MQWAVGRRWAWAALLLAVAAVLTQVVWLWLGTQSFVFQREEIAQLARQYAGLDHELAFSRLIVELRRLHP GHVLPDEELQWVFVNAGGWMGAMCLLHASLSEYVLLFGTALGSRGHSGRYWAEISDTIISGTFHQWREGT TKSEVFYPGETVVHGPGEATAVEWGPNTWMVEYGRGVIPSTLAFALADTVFSTQDFLTLFYTLRSYARGL

RLELTTYLFGQDP

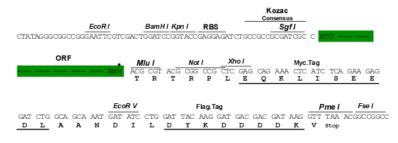
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6083 d01.zip

Restriction Sites: Sgfl-Mlul

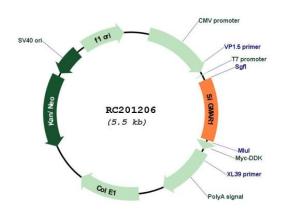
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_005866

ORF Size: 669 bp

Sigma1 receptor (SIGMAR1) (NM_005866) Human Tagged ORF Clone - RC201206

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: <u>NM 005866.4</u>

 RefSeq Size:
 1728 bp

 RefSeq ORF:
 672 bp

 Locus ID:
 10280

 UniProt ID:
 Q99720

Domains: ERG2 Sigma1R

Protein Families: Druggable Genome, GPCR, Transmembrane

9p13.3

MW: 25.1 kDa

Cytogenetics:

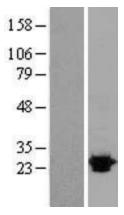
Gene Summary: This gene encodes a receptor protein that interacts with a variety of psychotomimetic drugs,

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

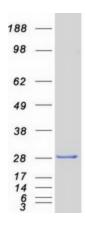
distinct isoforms. [provided by RefSeq, Aug 2013]



Product images:



Western blot validation of overexpression lysate (Cat# [LY401778]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201206 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SIGMAR1 protein (Cat# [TP301206]). The protein was produced from HEK293T cells transfected with SIGMAR1 cDNA clone (Cat# RC201206) using MegaTran 2.0 (Cat# [TT210002]).