

## Product datasheet for **RG201206**

### 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:	TurboGFP
Symbol:	Sigma1 receptor
Synonyms:	ALS16; DSMA2; hSigmaR1; OPRS1; SIG-1R; sigma1R; SR-BP; SR-BP1; SRBP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201206 representing NM_005866 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGTGGGCCGTGGCCGGCGGTGGCGTGGGCCGCGCTGCTCCTGGCTGTCGCAGCGGTGCTGACCC  
AGGTCGTCTGGCTCTGGCTGGGTACGCAGAGCTTCGTCTCCAGCGGAAGAGATAGCGCAGTTGGCGCG  
GCAGTACGCTGGGCTGGACCACGAGCTGGCCTTCTCGTCTGATCGTGGAGCTGCGCGGCTGCACCCA  
GGCCACGTGCTGCCCGACGAGGAGCTGCAGTGGGTGTTCTGTAATGCGGGTGGCTGGATGGCGCCATGT  
GCCTTCTGCACGCTCGCTGTCCGAGTATGTGCTGCTCTTCGGCACCGCCTTGGGCTCCCGCGGCCACTC  
GGGGCGCTACTGGGCTGAGATCTCGGATACCATCATCTCTGGCACCTCCACAGTGGAGAGAGGGCACC  
ACCAAAAGTGAGGTCTTCTACCCAGGGGAGACGGTAGTACACGGGCTGGTGAGGCAACAGCTGTGGAGT  
GGGGGCCAAACACATGGATGGTGGAGTACGGCCGGGGCGTCATCCCATCCACCCTGGCCTTCGCGCTGGC  
CGACACTGTCTTACGACCCAGGACTTCCTCACCTCTTATACTCTTCGCTCCTATGCTCGGGGCCCTC  
CGGCTTGAGCTCACACCTACCTTTGGCCAGGACCCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG201206 representing NM\_005866  
 Red=Cloning site Green=Tags(s)

MQWAVGRRWAWAALLLAVA AVL TQVVLWLGTQSFVFQREEIAQLARQYAGLDHELAFSRLIVELRRLHP  
 GHVLPDEELQWVFNAGGWGMAMCLLHASLSEYVLLFGTALGSRGHSGRYWAEISDTIISGTFHQWREGT  
 TKSEVFPGETVVHGPGEATAVEWGPNTWMVEYGRGVIPSTLAFALADTVFSTQDFLTLFYTLRSYARGL  
 RLELTTYLFGQDP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005866

**ORF Size:** 669 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\\_005866.4](#)

**RefSeq Size:** 1655 bp

**RefSeq ORF:** 672 bp

**Locus ID:** 10280

**UniProt ID:** [Q99720](#)

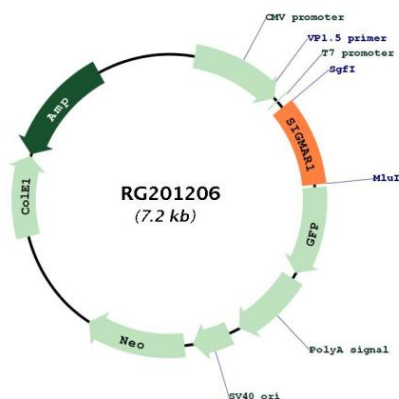
**Cytogenetics:** 9p13.3

**Domains:** ERG2\_Sigma1R

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**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:



Circular map for RG201206