

## **Product datasheet for RG235684**

### OriGene Technologies, Inc.

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# Sigma1 receptor (SIGMAR1) (NM\_001282209) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Sigma1 receptor (SIGMAR1) (NM\_001282209) Human Tagged ORF Clone

Tag: TurboGFP
Symbol: SIGMAR1

Synonyms: ALS16; DSMA2; hSigmaR1; OPRS1; SIG-1R; sigma1R; SR-BP; SR-BP1; SRBP

Mammalian Cell No

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG235684 representing NM\_001282209.
Sequence: Blue=ORF Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGTGCCTTCTGCACGCCTCGCTGTCCGAGGGAGACGGTAGTACACGGGCCTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence: >Peptide sequence encoded by RG235684

Blue=ORF Red=Cloning site Green=Tag(s)

MQWAVGRRWAWAALLLAVAAVLTQVVWLWLGTQSFVFQREEIAQLARQYAGLDHELAFSRLIVELRRLH

 ${\tt PGHVLPDEELQWVFVNAGGWMGAMCLLHASLSEGDGSTRAW}$ 

TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA

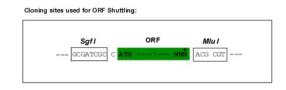
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

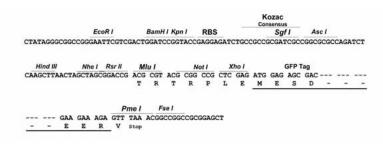
Restriction Sites: Sgfl-Mlul



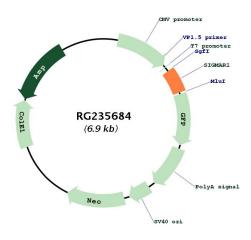


#### **Cloning Scheme:**





#### Plasmid Map:



ACCN: NM\_001282209

ORF Size: 330 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



#### Sigma1 receptor (SIGMAR1) (NM\_001282209) Human Tagged ORF Clone - RG235684

**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).

RefSeq: <u>NM 001282209.1</u>, <u>NP 001269138.1</u>

RefSeq Size: 1588 bp RefSeq ORF: 333 bp Locus ID: 10280

 UniProt ID:
 Q99720

 Cytogenetics:
 9p13.3

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

**MW:** 12.9 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]