

## Product datasheet for **MR202589**

### Sigmar1 (NM\_011014) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sigmar1 (NM\_011014) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Sigmar1  
**Synonyms:** mSig; O; Oprs1; Si; Sig1R; sigma1R  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR202589 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGTGGGCCGCGGGACGGCGGTGGGCATGGATCACCCCTGATTCTGACTATTATCGCAGTGCTGATCC  
AGGCCGCCTGGTTGTGGCTGGGCACTCAAACCTTCGTCTTCTCTAGAGAAGAAATAGCGCAGCTTGCTCG  
ACAGTATGCGGGCTGGACCATGAGCTTGCCTTCTCTCGGCTGATCGTGGAGCTGCGGAGGCTGCACCCA  
GGCCACGTGCTGCCGGATGAGGAGCTGCAGTGGTATTTGTGAACGCGGGCGGCTGGATGGCGCCATGT  
GTATTCTGCACGCCTCGCTGTCTGAGTACGTGCTCTTCGGCACCGCCCTGGGCTCCCATGGCCATTC  
GGGACGATACTGGCTGAGATTTCTGACACCATCATCTCTGGCACCTTCCACCAATGGAAAGAGGGCACC  
ACGAAAAGTGAGGTCTTCTACCCAGGAGAGACAGTTGTACACGGGCTGGAGAAGCAACGGCTCTGGAGT  
GGGGACCAACACGTGGATGGTGGAGTACGGCCGGGTGTTATTCGGTCTACCCTGTTCTTTGCACTAGC  
CGACACTTTCTCAGCACCCAGGACTACCTCACACTCTTCTATACCCTTCGGGCCATGCCCGGGGCCCTC  
CGGCTTGAGCTTACCACCTACCTTTGGCCAAGACTCC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR202589 protein sequence  
 Red=Cloning site Green=Tags(s)

MPWAAGRRAWITLILTIIAVLIQAAWLWLTQNFVFSREEIAQLARQYAGLDHELAFSRLIVELRRLHP  
 GHVLPDEELQWVFNAGGWGMGAMCILHASLSEYVLLFGTALGSHGHSGRYWAEISDTIISGTFHQWKEGT  
 TKSEVFYPGETVVHGPGEATALEWGPNTWMVEYGRGVIPSTLFFALADTFFSTQDYLTLYTLRAYRGL  
 RLELTTYLFGQDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_011014

**ORF Size:** 672 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\\_011014.3](#)

**RefSeq Size:** 1640 bp

**RefSeq ORF:** 672 bp

**Locus ID:** 18391

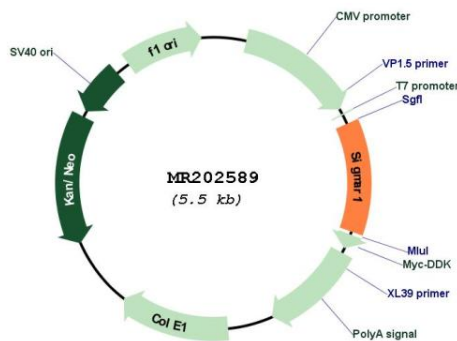
**UniProt ID:** [O55242](#)

**Cytogenetics:** 4 A5

**MW:** 25.2 kDa

**Gene Summary:** This gene encodes a transmembrane protein located in the endoplasmic reticulum. The encoded protein is a receptor that binds several endogenous ligands, including N,N-dimethyltryptamine, progesterone and pregnenolone and a variety of non-opiate compounds. The encoded protein plays a role in regulating the activity of ion channels, acting as a chaperone and protecting cells from oxidative stress. In humans, this receptor has been associated with Alzheimer's and Parkinson's diseases, stroke and numerous disease conditions such as depression, pain and addiction. Alternative splicing results in multiple transcript variants encoding different isoforms.[provided by RefSeq, Nov 2013]

**Product images:**



Circular map for MR202589