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# Product datasheet for MR228406

## Sigmar1 (NM_001286539) Mouse Tagged ORF Clone

### Product data:

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| **Product Type:** | Expression Plasmids |
| **Product Name:** | Sigmar1 (NM_001286539) Mouse Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | Sigmar1 |
| **Synonyms:** | mSig; O; Oprs1; Si; Sig1R; sigma1R |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |
| **Cell Selection:** | Neomycin |
| **ORF Nucleotide Sequence:** | >MR228406 representing NM_001286539<br>Red=Cloning site Blue=ORF Green=Tags(s)<br><br>TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC<br>GCCGCGATCGCC<br><br>ATGCCGTGGGCCGCGGGACGGCGGTGGGCATGGATCACCCTGATTCTGACTATTATCGCAGTGCTGATCC<br>AGGCCGCCTGGTTGTGGCTGGGCACTCAAAACTTCGTCTTCTCTAGAGAAGAAATAGCGCAGCTTGCTCG<br>ACAGTATGCGGGGCTGGACCATGAGCTTGCCTTCTCTCGGCTGATCGTGGAGCTGCGGAGGCTGCACCCA<br>GGCCACGTGCTGCCGGATGAGGAGCTGCAGTGGGTATTTGTGAACGCGGGCGGCTGGATGGGCGCCATGT<br>GTATTCTGCACGCCTCGCTGTCTGAGTACGTGCTGCTCTTCGGCACCGCCCTGGGCTCCCATGGCCATTC<br>GGGAGAGACAGTTGTACACGGGCCTGGAGAAGCAACGGCTCTGGAGTGGGGACCAAACACGTGGATGGTG<br>GAGTACGGCCGGGGTGTTATTCCGTCTACCCTGTTCTTTGCACTAGCCGACACTTTCTTCAGCACCCAGG<br>ACTACCTCACACTCTTCTATACCCTTCGGGCCTATGCCCGGGGCCTCCGGCTTGAGCTTACCACCTACCT<br>CTTTGGCCAAGACTCC<br><br>ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT<br>ACAAGGATGACGACGATAAGGTTTAA |
| **Protein Sequence:** | >MR228406 representing NM_001286539<br>Red=Cloning site Green=Tags(s)<br><br>MPWAAGRRWAWITLILTIIAVLIQAAWLWLGTQNFVFSREEIAQLARQYAGLDHELAFSRLIVELRRLHP<br>GHVLPDEELQWVFVNAGGWMGAMCILHASLSEYVLLFGTALGSHGHSGETVVHGPGEATALEWGPNTWMV<br>EYGRGVIPSTLFFALADTFFSTQDYLTLFYTLRAYARGLRLELTTYLFGQDS<br><br>TRTRPLEQKLISEEDLAANDILDYKDDDDKV |
| **Restriction Sites:** | SgfI-MluI |

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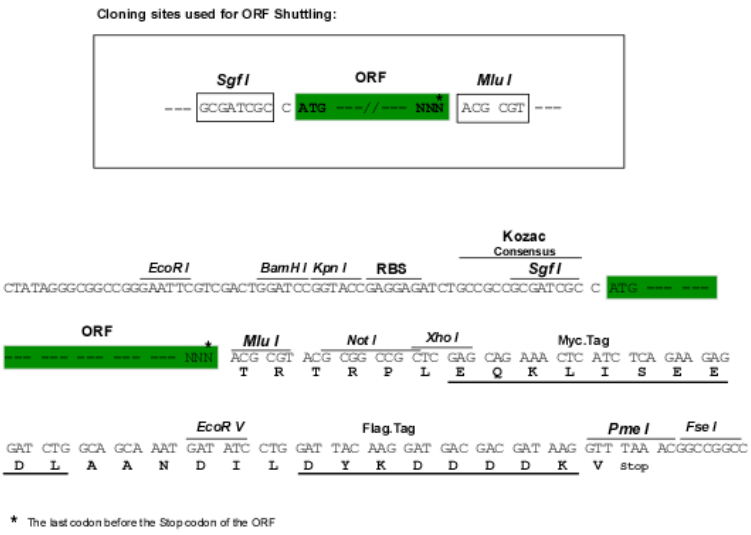
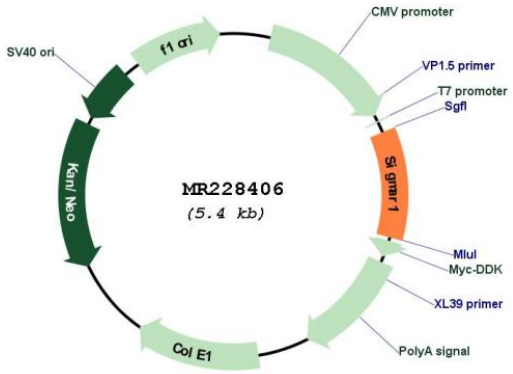
**Cloning Scheme:**




**Plasmid Map:**




**ACCN:** NM_001286539

**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).

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| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001286539.1, NP_001273468.1 |
| **RefSeq Size:** | 1547 bp |
| **RefSeq ORF:** | 579 bp |
| **Locus ID:** | 18391 |
| **UniProt ID:** | O55242 |
| **Cytogenetics:** | 4 A5 |
| **MW:** | 22.1 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 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] |