

Product datasheet for **MC225657**

Sigmar1 (NM_001286551) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sigmar1 (NM_001286551) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sigmar1
Synonyms:	mSig; O; Oprs1; Si; Sig1R; sigma1R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC225657 representing NM_001286551

Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGTGGGCCGCGGGACGGCGGTGGGCATGGATCACCTGATTCTGACTATTATCGCAGTGCTGATCC
AGGCCGCTGTTGTGGCTGGGCACTCAAACCTTCGTCTTCTCTAGAGAAGAAATAGCGCAGCTTGCTCG
ACAGTATCGGGGCTGGACCATGAGCTTGCCTTCTCTCGGCTGATCGTGGAGCTGCGGAGGCTGCACCCA
GGCCACGTGCTGCCGGATGAGGAGCTGCAGTGGGTATTTGTGAACGCGGGCGGCTGGATGGCGCCATGT
GTATTCTGCACGCCTCGCTGTCTGAGACGATACTGGG**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_001286551
Insert Size:	321 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.



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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:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001286551.1</u> , <u>NP_001273480.1</u>
RefSeq Size:	1593 bp
RefSeq ORF:	321 bp
Locus ID:	18391
UniProt ID:	<u>O55242</u>
Cytogenetics:	4 A5
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (7) differs in the 3' UTR and uses an alternate splice site in the coding region which results in a frameshift compared to variant 1. The encoded protein (isoform 7; also known as short form sigma1R) is shorter and has a distinct C-terminus compared to isoform 1. This isoform negatively regulates the function of the longest isoform (1) by forming a complex with the latter (PMID 22619170). Variants 7 and 8 encode the same protein.</p>