

### **Product datasheet for TL501557**

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# Sigmar1 Mouse shRNA Plasmid (Locus ID 18391)

**Product Type:** shRNA Plasmids

**Product Name:** Sigmar1 Mouse shRNA Plasmid (Locus ID 18391)

**Locus ID:** 18391

**Synonyms:** mSig; O; Oprs1; Si; Sig1R; sigma1R

**Vector:** pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

**Product data:** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** Sigmar1 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 18391).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

**RefSeq:** BC002000, BC019930, NM 001286538, NM 001286539, NM 001286540, NM 001286541,

NM 001286542, NM 001286551, NM 001286605, NM 011014, NM 011014.1, NM 011014.2, NM 011014.3, NM 001286551.1, NM 001286605.1, NM 001286542.1, NM 001286541.1,

NM 001286540.1, NM 001286539.1, NM 001286538.1, BM507398

UniProt ID: 055242

**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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



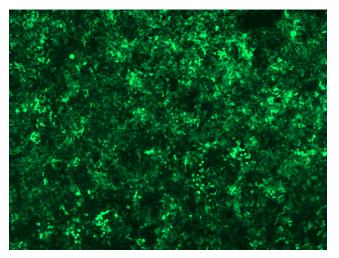


### Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

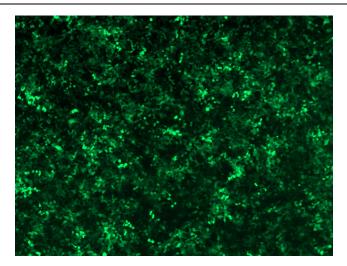
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

## **Product images:**



GFP signal was observed under microscope at 48 hours after transduction of TL501557B virus into HEK293 cells. TL501557B virus was prepared using lenti-shRNA TL501557B and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of [TL501557C] virus into HEK293 cells. [TL501557C] virus was prepared using lenti-shRNA [TL501557C] and [TR30037] packaging kit.