

Product datasheet for TF311012

OriGene Technologies, Inc.

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Sigma1 receptor (SIGMAR1) Human shRNA Plasmid Kit (Locus ID 10280)

Product data:

Product Type: shRNA Plasmids

Product Name: Sigma1 receptor (SIGMAR1) Human shRNA Plasmid Kit (Locus ID 10280)

Locus ID: 10280

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

Vector: pRFP-C-RS (TR30014)

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

Mammalian Cell

Selection:

Puromycin

Format:

Retroviral plasmids

Components: SIGMAR1 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID =

10280). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 001282205, NM 001282206, NM 001282207, NM 001282208, NM 001282209,

NM 005866, NM 147157, NM 147158, NM 147159, NM 147160, NR 104108, NM 005866.1,

NM 005866.2, NM 005866.3, NM 147157.1, NM 147157.2, NM 001282209.1,

NM 001282206.1, NM 001282205.1, NM 001282208.1, NM 001282207.1, NM 147158.1, BC004899, BC004899.2, BC006307, BC007839, BC010104, NM 005866.4, NM 001282205.2

UniProt ID: Q99720

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]

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).