

## Product datasheet for **TR709386**

### Htr2c Rat shRNA Plasmid (Locus ID 25187)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Htr2c Rat shRNA Plasmid (Locus ID 25187)
Locus ID:	25187
Synonyms:	5-HT2C; 5-HTR2C; 5HT-1C
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Htr2c - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 25187). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_012765</a> , <a href="#">NM_012765.1</a> , <a href="#">NM_012765.2</a> , <a href="#">NM_012765.3</a>
UniProt ID:	<a href="#">P08909</a>
Summary:	Serotonin (5-hydroxytryptamine, 5-HT), a neurotransmitter, elicits a wide array of physiological effects by binding to several receptor subtypes, including the 5-HT2 family of seven-transmembrane-spanning, G-protein-coupled receptors, which activate phospholipase C and D signaling pathways. This gene encodes the 2C subtype of serotonin receptor and its mRNA is subject to multiple RNA editing events, where genomically encoded adenosine residues are converted to inosines. RNA editing is predicted to alter amino acids within the second intracellular loop of the 5-HT2C receptor and generate receptor isoforms that differ in their ability to interact with G proteins and the activation of phospholipase C and D signaling cascades, thus modulating serotonergic neurotransmission in the central nervous system. Studies in rodents show altered patterns of RNA editing in response to drug treatments and stressful situations. [provided by RefSeq, Jul 2008]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**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](mailto: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).