

Product datasheet for **TR502028**

Siah2 Mouse shRNA Plasmid (Locus ID 20439)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Siah2 Mouse shRNA Plasmid (Locus ID 20439)
Locus ID:	20439
Synonyms:	AA415433; Sinh2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Siah2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 20439). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC058400 , NM_009174 , NM_009174.1 , NM_009174.2 , NM_009174.3
UniProt ID:	Q06986



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Summary:

E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:11257006, PubMed:14645235, PubMed:14645526, PubMed:17003045, PubMed:9637679, PubMed:26070566). E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates (PubMed:11257006, PubMed:14645235, PubMed:14645526, PubMed:17003045, PubMed:9637679, PubMed:26070566). Mediates E3 ubiquitin ligase activity either through direct binding to substrates or by functioning as the essential RING domain subunit of larger E3 complexes. Mediates ubiquitination and proteasomal degradation of DYRK2 in response to hypoxia. Promotes monoubiquitination of SNCA (By similarity). Triggers the ubiquitin-mediated degradation of many substrates, including proteins involved in transcription regulation (GPS2, POU2AF1, PML, NCOR1), a cell surface receptor (DCC), an antiapoptotic protein (BAG1), and a protein involved in synaptic vesicle function in neurons (SYP) (PubMed:11257006, PubMed:14645235, PubMed:14645526, PubMed:17003045, PubMed:9637679, PubMed:26070566). It is thereby involved in apoptosis, tumor suppression, cell cycle, transcription and signaling processes. Has some overlapping function with SIAH1. Triggers the ubiquitin-mediated degradation of TRAF2, whereas SIAH1 does not. Regulates cellular clock function via ubiquitination of the circadian transcriptional repressors NR1D1 and NR1D2 leading to their proteasomal degradation. Plays an important role in mediating the rhythmic degradation/clearance of NR1D1 and NR1D2 contributing to their circadian profile of protein abundance (PubMed:26392558).[UniProtKB/Swiss-Prot Function]

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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

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).