

## Product datasheet for **TR501973**

### Satb1 Mouse shRNA Plasmid (Locus ID 20230)

#### Product data:

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|---------------------------|--|
| Product Type:             | shRNA Plasmids   |
| Product Name:             | Satb1 Mouse shRNA Plasmid (Locus ID 20230)   |
| Locus ID:                 | 20230  |
| Synonyms:                 | 2610306G12Rik; AW413156  |
| Vector:                   | pRS (TR20003)  |
| E. coli Selection:        | Ampicillin   |
| Mammalian Cell Selection: | Puromycin  |
| Format:                   | Retroviral plasmids  |
| Components:               | Satb1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 20230). 5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.  |
| RefSeq:                   | <a href="#">BC011132</a> , <a href="#">NM_001163630</a> , <a href="#">NM_001163631</a> , <a href="#">NM_001163632</a> , <a href="#">NM_009122</a> , <a href="#">NM_001357636</a> , <a href="#">NM_001357637</a> , <a href="#">NM_001357638</a> , <a href="#">NM_001357640</a> , <a href="#">NM_009122.1</a> , <a href="#">NM_009122.2</a> , <a href="#">NM_001163632.1</a> , <a href="#">NM_001163630.1</a> , <a href="#">NM_001163631.1</a>   |
| UniProt ID:               | <a href="#">Q60611</a>   |
| Summary:                  | Required for the switching of fetal globin species, and beta- and gamma-globin genes regulation during erythroid differentiation. Plays a role in chromatin organization and nuclear architecture during apoptosis (By similarity). Crucial silencing factor contributing to the initiation of X inactivation mediated by Xist RNA that occurs during embryogenesis and in lymphoma. Binds to DNA at special AT-rich sequences, the consensus SATB1-binding sequence (CSBS), at nuclear matrix- or scaffold-associated regions. Thought to recognize the sugar-phosphate structure of double-stranded DNA. Transcriptional repressor controlling nuclear and viral gene expression in a phosphorylated and acetylated status-dependent manner, by binding to matrix attachment regions (MARs) of DNA and inducing a local chromatin-loop remodeling. Acts as a docking site for several chromatin remodeling enzymes and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. Modulates genes that are essential in the maturation of the immune T-cell CD8SP from thymocytes.[UniProtKB/Swiss-Prot Function] |



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- 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](mailto: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](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).