

Product datasheet for **TR310091**

Proteasome Activator Subunit 4 (PSME4) Human shRNA Plasmid Kit (Locus ID 23198)

Product data:

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| Product Type: | shRNA Plasmids |
| Product Name: | Proteasome Activator Subunit 4 (PSME4) Human shRNA Plasmid Kit (Locus ID 23198) |
| Locus ID: | 23198 |
| Synonyms: | PA200 |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | PSME4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 23198). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | NM_014614 , NM_014614.1 , NM_014614.2 , BC017090 , BC032418 , BC043602 , BC062760 , BC071768 , BC112169 , BC113668 , BC143737 , BC143739 , NM_014614.3 |
| UniProt ID: | Q14997 |
| Summary: | Associated component of the proteasome that specifically recognizes acetylated histones and promotes ATP- and ubiquitin-independent degradation of core histones during spermatogenesis and DNA damage response. Recognizes and binds acetylated histones via its bromodomain-like (BRDL) region and activates the proteasome by opening the gated channel for substrate entry. Binds to the core proteasome via its C-terminus, which occupies the same binding sites as the proteasomal ATPases, opening the closed structure of the proteasome via an active gating mechanism. Component of the spermatoproteasome, a form of the proteasome specifically found in testis: binds to acetylated histones and promotes degradation of histones, thereby participating actively to the exchange of histones during spermatogenesis. Also involved in DNA damage response in somatic cells, by promoting degradation of histones following DNA double-strand breaks.[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 . |



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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).