

## **Product datasheet for TL506636**

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## Senp1 Mouse shRNA Plasmid (Locus ID 223870)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Senp1 Mouse shRNA Plasmid (Locus ID 223870)

**Locus ID:** 223870

**Synonyms:** 2310046A20Rik; D15Ertd528e; E330036L07Rik; suPr-2

**Vector:** pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** Senp1 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 223870).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC023129</u>, <u>NM 144851</u>, <u>NM 144851.1</u>, <u>NM 144851.2</u>, <u>NM 144851.3</u>, <u>NM 144851.4</u>,

NM 144851.5

UniProt ID: P59110

**Summary:** Protease that catalyzes two essential functions in the SUMO pathway (PubMed:15923632,

PubMed:29499132). The first is the hydrolysis of an alpha-linked peptide bond at the C-terminal end of the small ubiquitin-like modifier (SUMO) propeptides, SUMO1, SUMO2 and SUMO3 leading to the mature form of the proteins. The second is the deconjugation of SUMO1, SUMO2 and SUMO3 from targeted proteins, by cleaving an epsilon-linked peptide bond between the C-terminal glycine of the mature SUMO and the lysine epsilon-amino group of the target protein. Deconjugates SUMO1 from HIPK2 (By similarity). Deconjugates SUMO1 from HDAC1 and BHLHE40/DEC1, which decreases its transcriptional repression activity (By similarity). Deconjugates SUMO1 from CLOCK, which decreases its transcriptional

activation activity (By similarity). Deconjugates SUMO2 from MTA1 (By similarity).

Deconjugates SUMO2 from MTA1 (By similarity). Deconjugates SUMO1 from METTL3 (By similarity). Desumoylates CCAR2 which decreases its interaction with SIRT1 (By similarity). Deconjugates SUMO1 from GPS2 (PubMed:29499132).[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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).