

## **Product datasheet for TR506972**

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## Cyp26b1 Mouse shRNA Plasmid (Locus ID 232174)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Cyp26b1 Mouse shRNA Plasmid (Locus ID 232174)

**Locus ID:** 232174

Synonyms: CP26; P450RAI-2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Selection:

Puromycin

Format: Retroviral plasmids

Components: Cyp26b1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

232174). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC059246, NM 001177713, NM 175475, NM 175475.1, NM 175475.2, NM 175475.3,</u>

NM 001177713.1

UniProt ID: O811W2

Summary: Involved in the metabolism of retinoic acid (RA), rendering this classical morphogen inactive

through oxidation. Involved in the specific inactivation of all-trans-retinoic acid (all-trans-RA), with a preference for the following substrates: all-trans-RA > 9-cis-RA > 13-cis-RA. Generates several hydroxylated forms of RA, including 4-OH-RA, 4-oxo-RA, and 18-OH-RA. Essential for postnatal survival. Plays a central role in germ cell development: acts by degrading RA in the developing testis, preventing STRA8 expression, thereby leading to delay of meiosis. Required for the maintenance of the undifferentiated state of male germ cells during embryonic

development in Sertoli cells, inducing arrest in G0 phase of the cell cycle and preventing meiotic entry. Plays a role in skeletal development, both at the level of patterning and in the ossification of bone and the establishment of some synovial joints.[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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





## 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).