

## Product datasheet for TR302883

## NSD1 Human shRNA Plasmid Kit (Locus ID 64324)

## **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** NSD1 Human shRNA Plasmid Kit (Locus ID 64324)

Locus ID:

ARA267; KMT3B; SOTOS; SOTOS1; STO Synonyms:

Vector: pRS (TR20003)

E. coli Selection: Ampicillin Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Components: NSD1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

64324). 5µg purified plasmid DNA per construct

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

NM 022455, NM 172349, NM 172349.1, NM 172349.2, NM 022455.1, NM 022455.2, RefSeq:

NM 022455.3, BC021961, BC139789, BC144629, BC150628, NM 001365684

UniProt ID: Q96L73

**Summary:** This gene encodes a protein containing a SET domain, 2 LXXLL motifs, 3 nuclear translocation

> signals (NLSs), 4 plant homeodomain (PHD) finger regions, and a proline-rich region. The encoded protein enhances androgen receptor (AR) transactivation, and this enhancement can be increased further in the presence of other androgen receptor associated coregulators. This protein may act as a nucleus-localized, basic transcriptional factor and also as a

> bifunctional transcriptional regulator. Mutations of this gene have been associated with Sotos syndrome and Weaver syndrome. One version of childhood acute myeloid leukemia is the result of a cryptic translocation with the breakpoints occurring within nuclear receptorbinding Su-var, enhancer of zeste, and trithorax domain protein 1 on chromosome 5 and nucleoporin, 98-kd on chromosome 11. Multiple transcript variants encoding distinct

isoforms have been identified for this gene. [provided by RefSeq, Sep 2018]

These shRNA constructs were designed against multiple splice variants at this gene locus. To shRNA Design:

> 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 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).