

Product datasheet for **SC309685**

NSD1 (NM_022455) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NSD1 (NM_022455) Human Untagged Clone
Tag:	Tag Free
Symbol:	NSD1
Synonyms:	ARA267; KMT3B; SOTOS; SOTOS1; STO
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_022455 edited
GAGAGAGAGAGATCCAGCTGCTCGACCCCTGGCGAGGGGAGGGGAGGACTAGTCCTGTTT
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 AAGTCCACTCTGGAGTCAAAAAAAAAAAAAAAAAAAAAA

- Restriction Sites:** Please inquire
- ACCN:** NM_022455
- Insert Size:** 8800 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** The open reading frame of this TrueClone was fully sequenced and found to be a good match to the protein associated to this reference except for one SNP.
- Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
- RefSeq:** [NM_022455.3](#), [NP_071900.2](#)
- RefSeq Size:** 8458 bp
- RefSeq ORF:** 8091 bp
- Locus ID:** 64324
- UniProt ID:** [Q96L73](#)
- Cytogenetics:** 5q35.3

Domains: PWWP, SET, PHD, AWS

Protein Families: Druggable Genome

Protein Pathways: Lysine degradation

Gene 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 receptor-binding 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]

Transcript Variant: This variant (2), also known as ARA267-beta, represents the longer transcript, and encodes the longer isoform b. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments and orthologous data.