

Recombinant Human NSD1, GST-tagged

Cat. No. NSD1-82H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NSD1, amino-acids 1849-2094 with N-terminal GST tag, MW = 54 kDa, expressed in an E.coli expression system.
Species	Human
Source	E.coli
ProteinLength	1849-2094 a.a.
Description	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. Two transcript variants encoding distinct isoforms have been identified for this gene.
Form	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 4 mM Glutathione, 20% Glycerol and 3mM DTT.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	54 kDa
Purity	>76%
Applications	Suitable for protein binding studies, as an immunogen, or as a Western blotting control.
Stability	>12 months at –80°C

GENE INFORMATION

Gene Name	NSD1 nuclear receptor binding SET domain protein 1 [Homo sapiens]
Official Symbol	NSD1
Synonyms	NSD1; nuclear receptor binding SET domain protein 1; Sotos syndrome , STO; histone-lysine N-methyltransferase, H3 lysine-36 and H4 lysine-20 specific; ARA267; FLJ22263; KMT3B; H3-K36-HMTase; H4-K20-HMTase; lysine N-methyltransferase 3B; NR-binding SET domain-containing protein; androgen receptor-associated coregulator 267; androgen receptor coactivator 267 kDa protein; androgen receptor-associated protein of 267 kDa; nuclear receptor-binding SET domain-containing protein 1; STO; SOTOS; FLJ10684; FLJ44628; DKFZp666C163
Gene ID	64324
mRNA Refseq	NM_022455
Protein Refseq	NP_071900
MIM	606681

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	Q96L73
Chromosome Location	5q35
Pathway	Androgen Receptor Signaling Pathway, organism-specific biosystem; Lysine degradation, organism-specific biosystem; Lysine degradation, conserved biosystem;
Function	androgen receptor binding; chromatin binding; estrogen receptor binding; histone methyltransferase activity (H3-K36 specific); histone methyltransferase activity (H3-K36 specific); histone methyltransferase activity (H4-K20 specific); ligand-dependent nuclear receptor binding; metal ion binding; methyltransferase activity; retinoic acid receptor binding; retinoid X receptor binding; thyroid hormone receptor binding; transcription cofactor activity; transcription corepressor activity; transferase activity; zinc ion binding

 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA