

NSD3 recombinant protein

Recombinant NSD3 (WHSC1L1)-SET protein

CATALOG #
AAA59707

HOST
E Coli

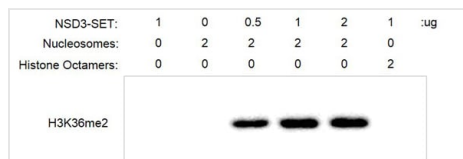
PRODUCT SYNONYMS

NSD3; Recombinant NSD3 (WHSC1L1)-SET protein; pp14328; NSD3 recombinant protein

PRODUCT SPECIFICATIONS

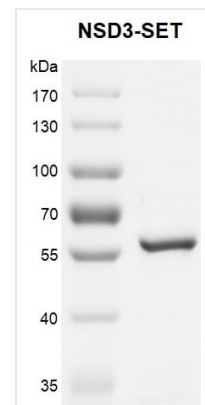
Host	E Coli
Form/Format	Recombinant NSD3 (WHSC1L1)-SET (a.a. 1021-1320) is supplied in 25mM Tris pH8.0, 300mM NaCl, 5% glycerol.
Protein Species	Human
Tag	GST-Tag
Notes	Recombinant NSD3 (WHSC1L1)-SET protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. HMT Assay Conditions: 2ug recombinant nucleosomes were incubated with different concentrations of recombinant NSD3 (WHSC1L1)-SET protein in 30ul reaction system containing 50mM TrisCl, pH 8.6, 0.02% Triton X-100, 2mM MgCl ₂ , 1mM TCEP, 50uM SAM for 3 hours at room temperature. Activity was detected by Western Blot.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



WB (Western Blot)

Recombinant NSD3 (WHSC1L1)-SET activity assay. 2 ug recombinant nucleosomes were incubated with NSD3 (WHSC1L1)-SET protein in 30 ul reaction system containing 50 mM Tris-HCl, pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP, 50 uM SAM for 3 h at RT. 5 ul reaction products were loaded on a 12.5% SDS-PAGE gel. Western Blot was used to detect reaction products (H3K36me2). NSD3 (WHSC1L1)-SET only was used as negative control. Results show that the activity of NSD3 (WHSC1L1)-SET with nucleosomes as substrate is much better than its activity with histone octamers as substrate.



SDS-PAGE

Recombinant NSD3 (WHSC1L1)-SET protein gel. Recombinant NSD3 (WHSC1L1)-SET protein was run on a 10% SDS-PAGE gel and stained with Coomassie Blue. MW: 60kDa
Purity: > 90%

ADDITIONAL INFORMATION

Related Product Information for NSD3 recombinant protein	Short Description: Recombinant NSD3 (WHSC1L1)-SET peptide that includes amino acids 1021-1320 that contains the SET domain sequence of the human NSD3 (WHSC1L1) protein (accession number NP_075447.1) was expressed in E Coli and contains an N-terminal GST-Tag with an observed molecular weight of 60 kDa. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Background: NSD3 (WHSC1L1/Wolf-Hirschhorn Syndrome Candidate 1-Like 1) is a histone methyltransferase of NSD (nuclear receptor binding SET domain protein) family. NSD3 (WHSC1L1) can recognize and methylate several lysine marks if using histone as substrate. However, if using nucleosome as substrate, NSD3 (WHSC1L1) preferentially methylates lysine 36 of histone H3. The NSD3 (WHSC1L1) gene is amplified in several cancers, including lung cancer and head and neck cancer, and may play a role in carcinogenesis. NSD3 (WHSC1L1) includes the SET domain of NSD3 (WHSC1L1). The SET domain is a 130 to 140 amino acid, evolutionary conserved motif that was initially characterized in Drosophila proteins Su(var)3-9, EZH2, and TrxG, and plays a crucial role in substrate recognition and enzymatic activity.
Product Categories/Family for NSD3 recombinant protein	Recombinant Proteins ; Histone Methyltransferase (HMT)

NCBI AND UNIPROT INFORMATION

NCBI GI #	13699811
NCBI GeneID	54904
NCBI Accession #	NP_075447.1
NCBI GenBank Nucleotide #	NM_023034.1
UniProt Accession #	Q9BZ95 ; Q1RMD3 ; Q3B796 ; Q6ZSA5 ; Q9BYU8 ; Q9BYU9 ; Q9H2M8 ; Q9H9W9 ; Q9NXA6 ; B7ZL11 ; D3DSX1
Molecular Weight	160,314 Da
NCBI Official Full Name	histone-lysine N-methyltransferase NSD3 isoform long
NCBI Official Synonym Full Names	nuclear receptor binding SET domain protein 3
NCBI Official Symbol	NSD3
NCBI Official Synonym Symbols	KMT3F; KMT3G; WHISTLE; WHSC1L1; pp14328
NCBI Protein Information	histone-lysine N-methyltransferase NSD3
UniProt Protein Name	Histone-lysine N-methyltransferase NSD3
UniProt Gene Name	WHSC1L1
UniProt Synonym Gene Names	NSD3; WHSC1-like protein 1
UniProt Entry Name	NSD3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/whsc1l1-recombinant-protein-e-coli/59707>