

Datasheet for ABIN7564436  
**WHSC1 Protein (AA 1-1365) (His tag)**



[Go to Product page](#)

## Overview

|                               |  |
|-------------------------------|--|
| Quantity:                     | 1 mg   |
| Target:                       | WHSC1  |
| Protein Characteristics:      | AA 1-1365                                    |
| Origin:                       | Mouse  |
| Source:                       | HEK-293 Cells                                |
| Protein Type:                 | Recombinant                                  |
| Purification tag / Conjugate: | This WHSC1 protein is labelled with His tag. |
| Application:                  | Western Blotting (WB), SDS-PAGE (SDS)        |

## Product Details

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|-----------|--|
| Purpose:  | Custom-made recombinant Nsd2 Protein expressed in mammalian cells.   |
| Sequence: | MEFSIRKSPL SVQKVVKCMK MKQTPEILGS ANGKTQNC EV NHECSVFLSK AQLSNSLQEG<br>VMQKFNGHDA LPFLPAEKLK DLTSCVFNGE PGAHDTKL CF EAQEVKGIGT PPNTTPIKNG<br>SPEIKLKITK TYMNGKPLFE SSICGDGAAD VSQSEENEQK SDNKTRRN RK RSIKYDSLLE<br>QGLVEAALVS KISSPADKKI PVKKESC PNT GRDRDLLLKY NVGDLVWSKV SGYPWWPCMV<br>SADPLLHNHT KLBGQKKSAR QYHVQFFGDA PERAWIFEKS LVAFEGEEQF EKLCQESAKQ<br>APTKAEKIKL LKPISGRLRA QWEMGIVQAE EAASMSIEER KAKFTFLYVG DQLHLNPQVA<br>KEAGIVTEPL GEMVDSSGAS EEA AVDPGSV REEDIPTKRR RRTKRSSSAE NQEGDPGTDK<br>STPPKMAEAE PKRGVGS PAG RKKSTGSAPR SRKGD SAAQF LVFCQKHRDE VVAEHPDASG<br>EEIEELLGSQ WSMLNEKQKA RYNTKFSLMI SAQSEEDSGN GNGKKRSHTK RADDPAEDVD<br>VEDAPRKRLR ADKHSLRKRE TITDKTARTS SYKAIEAASS LKSQAATKNL SDACKPLKRR<br>NRASATASSA LGFNKSSSPS ASLTEHEVSD SPGDEPSESP YESADETQTE ASVSSKKSER |

GMAAKKEYVC QLCEKTGSL LCEGPCCGAF HLACLGLSRR PEGRFTCTEC ASGIHSCFVC  
KESKMEVKRC VVNQCCKFYH EACVKKYPLT VFESRGFRCP LHSCMSCHAS NPSNPRPSKG  
KMMRCVRCPV AYHGGDACLA AGCSVIASNS IICTGHFTAR KGKRHHHTHVN VSWCFVCSKG  
GSLLCCEACP AAFHPDCLNI EMPDGSWFCN DCRAGKLLHF QDIIWVKLGN YRWWPAEVCH  
PKNVPPNIQK MKHEIGEFPV FFFGSKDYWW THQARVFPYM EGDGRSRYQG VRGIGRVFKN  
ALQEAERFN EVKLQREARE TQESERKPPP YKHIKVNKPY GKVQIYTADI SEIPKCNCKP  
TDENPCGSDS ECLNRMLMFE CHPQVCPAGE YCQNQCFTKR QYPETKIIKT DGKGWGLVAK  
RDIRKGEFVN EYVGELIDEE ECMARIKYAH ENDITHFYML TIDKDRIIDA GPKGNYSRFM  
NHSCQPN CET LKWTVNGDTR VGLFAVCDIP AGTELTFNYN LDCLGNEKTV CRCGASNC SG  
FLGDRPKTSA SLSSEEKGGK AKKKTRRRRA KGEGKRQSED ECFRCGDGGQ LVLCDRKFC T  
KAYHLSCLGL GKRPFGKWE C PWHHCDVCGK PSTSFCHLCP NSFCKEHQDG TAFRSTQDGG  
SYCCEHDLRA DSSSSTKTEK PFPELKS KG KRKKRRCWRR VTDGK **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

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Purity: > 90 % as determined by Bis-Tris Page, Western Blot

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Grade: custom-made

## Target Details

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Target: WHSC1

## Target Details

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Alternative Name: Nsd2 ([WHSC1 Products](#))

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**Background:** Histone-lysine N-methyltransferase NSD2 (EC 2.1.1.357) (Multiple myeloma SET domain-containing protein) (MMSET) (Nuclear SET domain-containing protein 2) (Wolf-Hirschhorn syndrome candidate 1 protein homolog),FUNCTION: Histone methyltransferase which specifically dimethylates nucleosomal histone H3 at 'Lys-36' (H3K36me2) (PubMed:19483677, PubMed:32862441, PubMed:31636135). Also monomethylates nucleosomal histone H3 at 'Lys-36' (H3K36me) in vitro (PubMed:19483677). Does not trimethylate nucleosomal histone H3 at 'Lys-36' (H3K36me3) (By similarity). However, specifically trimethylates histone H3 at 'Lys-36' (H3K36me3) at euchromatic regions in embryonic stem (ES) cells (PubMed:19483677). By methylating histone H3 at 'Lys-36', involved in the regulation of gene transcription during various biological processes (PubMed:19483677, PubMed:31636135, PubMed:32862441, PubMed:23241889). In ES cells, associates with developmental transcription factors such as SALL1 and represses inappropriate gene transcription mediated by histone deacetylation (PubMed:19483677). During heart development, associates with transcription factor NKX2-5 to repress transcription of NKX2-5 target genes (PubMed:19483677). Plays an essential role in adipogenesis, by regulating expression of genes involved in pre-adipocyte differentiation (By similarity). During T-cell receptor (TCR) and CD28-mediated T-cell activation, promotes the transcription of transcription factor BCL6 which is required for follicular helper T (Tfh) cell differentiation (PubMed:31636135). During B-cell development, required for the generation of the B1 lineage (PubMed:32862441). During B2 cell activation, may contribute to the control of isotype class switch recombination (CRS), splenic germinal center formation, and the humoral immune response (PubMed:32862441). Plays a role in class switch recombination of the immunoglobulin heavy chain (IgH) locus during B-cell activation (PubMed:23241889). By regulating the methylation of histone H3 at 'Lys-36' and histone H4 at 'Lys-20' at the IgH locus, involved in TP53BP1 recruitment to the IgH switch region and promotes the transcription of IgA (PubMed:23241889). {ECO:0000250|UniProtKB:O96028, ECO:0000269|PubMed:19483677, ECO:0000269|PubMed:23241889, ECO:0000269|PubMed:31636135, ECO:0000269|PubMed:32862441}., FUNCTION: [Isoform RE-IIBP]: Histone methyltransferase which specifically dimethylates nucleosomal histone H3 at 'Lys-36' (H3K36me2) (By similarity). Mono-, di- and tri-methylates histone H3 at 'Lys-27' (H3K27me, H3K27me2, H3K27me3) (PubMed:18172012). Methylation of histone H3 at 'Lys-27' is controversial (By similarity). May act as a transcription regulator that binds DNA and suppresses IL5 transcription through HDAC recruitment (PubMed:18172012). {ECO:0000250|UniProtKB:O96028, ECO:0000269|PubMed:18172012}.

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Molecular Weight: 152.3 kDa

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## Target Details

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UniProt: [Q8BVE8](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months