

Product datasheet for **RC212790**

NSD3 (WHSC1L1) (NM_017778) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NSD3 (WHSC1L1) (NM_017778) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NSD3
Synonyms:	KMT3F; KMT3G; pp14328; WHISTLE; WHSC1L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC212790 representing NM_017778
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATTTCTCTTTCTTTTCATGCAAGGGATCATGGAAACACAATTCAGCAACCACCTCAACTATTG
 ACTCCGCCAACATCCGTCAGGAGGATGCCTTTGATAACAACAGTGACATTGCTGAAGATGGTGGCCAGAC
 ACCATATGAAGCTACTTTGCAGCAAGGCTTTTCAGTACCCAGCTACAACAGAAGATCTTCCCTCCACTCACA
 AATGGGTATCCATCATCAATCAGTGTGTATGAACTCAAACAAAATACCAGTCATATAATCAGTATCCTA
 ATGGGTGACGCAATGGCTTTGGTGCAGTTAGAACTTTAGCCCCACTGACTATTATCATTAGAAATTC
 AAACACAAGACCACATGAAATTCGAAAAACCTCCCTCCACAGCCACCACCTCTCTTCGGTACCA
 CAACTGTGATTCAAAGAAGACTGGCTCACCTGAAATTAACAAAAAATACCAAACTATCCAGAATG
 GCAGGGAATTGTTGAGTCTTCCCTTTGTGGAGACCTTTAAATGAAGTACAGGCAAGTACAGCACACGAA
 ATCAAAGCATGAAAGCAGAAAAGAAAAGAGGAAAAAAGCAACAAGCATGACTCATCAAGATCTGAAGAG
 CGCAAGTCACACAAAATCCCAAATTAGAACAGAGGAACAAAATAGACCAAATGAGAGGGTTGACTG
 TATCAGAAAAACCAAGGGAAGAACAGTACTAAAAGAGGAAGCCCAAGTTAGCCAACTACTATCTTCTGT
 TCCAACAACGGAAGTGTCCACTGGTGTAAAGTTTCAGGTTGGCGATCTTGTGTGGTCCAAGTGGGAACC
 TATCTTGGTGGCCTTGTATGGTTTCAAGTATCCCCAGCTTGAGGTTTACTAAAAATTAACACAAGAG
 GTGCCCCGAGAATATCATGTCCAGTTTTTAGCAACCAGCCAGAGAGGGCGTGGGTTTATGAAAAACGGGT
 ACGAGAGTATAAAGGTCATAAACAGTATGAAGAATTACTGGCTGAGGCAACCAACAAGCCAGCAATCAC
 TCTGAGAAAACAAAAGATTCGAAAACCCGACCTCAGAGAGAACGTGCTCAGTGGGATATTGGCATTGCC
 ATGCAGAGAAAGCATTGAAAATGACTCGAGAAGAAAGAATAGAACAGTATACTTTTATTACATTGATAA
 ACAGCCTGAAGAGGCTTTATCCCAAGCAAAAAAGAGTGTTCCTCCAAAACCGAAGTTAAAAAACCCGA
 CGACCAAGATCTGTGCTGAATACTCAGCCAGAACAGACCAATGCAGGGGAGGTGGCTCCTCACTCTCAA
 GACTGAAATTCGGAGACATAGCCAGAGCGGCACACAAGTGCAGGAGGGAAGGCCACCGCTGTAA
 AATAGCCTGAAAACTGCGGCAGCAAGGAAATCCTTACCAGCTTCCATTACGATGCACAAAGGGAGCCTG
 GATTTGCAGAAGTGAACATGTCTCCAGTTGTGAAAATGAACAAGTGTGCTTTCAGAATGCTACAG
 GGGATGGGAAATTTATCGATCAATTTGTTTATTCAACAAAGGGAATTGGTAACAAAACAGAAATAAGTGT
 CAGGGGCAAGACAGGCTTATAATTTCTACACCAACCAGAGAAATGAAAAGCCAACGCAGAGTGTATCA
 TCTCCTGAAGCAACATCTGGTTCTACAGGCTCAGTAGAAAAGAAGCAACAGAGAAGATCAATTAGAACTC
 GTTCTGAATCAGAGAAATCCACTGAGGTTGTGCCAAAGAAGAAGTCAAAAAGGAGCAGGTTGAAACAGT
 TCTCAGGCTACAGTGAAGACTGGATTACAGAAAGGGTCCGGCGGACCGGGGAGTGACAGGGCTCTGTGAGA
 TTCAGTGACAGCTCCGTCTCCGACGATTGAGGAACTGTGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >RC212790 representing NM_017778
Red=Cloning site Green=Tags(s)

MDFSFSFMQIMGNTIQQPPQLIDSANIRQEDAFDNNSDIAEDGGQTPYEATLQQGFQYPATTEDLPPLT
 NGYPSSISVYETQTKYQSYNQYPNGSANGFGAVRNFSPTDYYHSEIPNTRPHEILEKPSPPQPPPPSVP
 QTVIPKKTGSPEIKLKITKTIQNGRELFESSLCGDLLNEVQASEHTKSKHESRKEKRKSNKHDSSRSEE
 RKSHKIPKLEPEEQNRPNERVDTVSEKPREEPVLKEEAPVQPIILSSVPTTEVSTGVKFQVGDLVWSKVG
 YPWWPCMVSSDPQLEVHTKINTRGAREYHVQFFSNQPERAWVHEKRVREYKGHKQYEELAEATKQASNH
 SEKQKIRKPRPQRERAQWDIGIAHAEKALKMTREERIEQYTFIYIDKQPEEALSQAKKSVASKTEVKKTR
 RPRSVLNTQPEQTNAgevassLSSTEIRRHSQRRHTSAEEEEPPPVKIAWKTAARKSLPASITMHKGS
 LDLQKCNMSPVVKIEQVVALQATGDGKFDQFVYSTKIGNKTEISVRGQDRLIISTPNQRNEKPTQSVS
 SPEATSGSTGSVEKKQRRSIRTRSESEKSTEVVPPKKIKKEQVETVPQATVKTGLQKGSADRGVQGSVR
 FSDSSVSAAIETVD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6494_h02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017778

ORF Size: 1935 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_017778.2](#), [NP_060248.2](#)

RefSeq Size: 3995 bp

RefSeq ORF: 1938 bp

Locus ID: 54904

UniProt ID: [Q9BZ95](#)

Cytogenetics: 8p11.23

Domains: PWWP

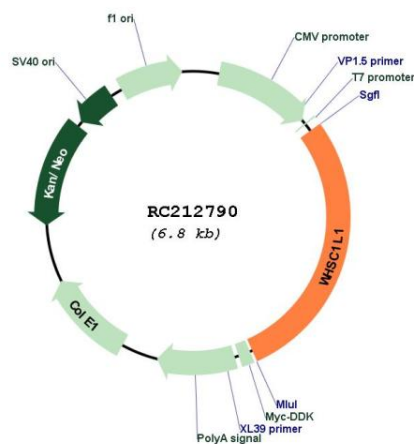
Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Lysine degradation

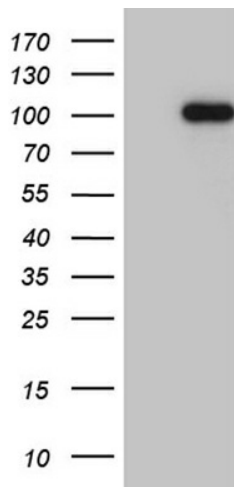
MW: 72.4 kDa

Gene Summary: This gene is related to the Wolf-Hirschhorn syndrome candidate-1 gene and encodes a protein with PWWP (proline-tryptophan-tryptophan-proline) domains. This protein methylates histone H3 at lysine residues 4 and 27, which represses gene transcription. Two alternatively spliced variants have been described. [provided by RefSeq, May 2015]

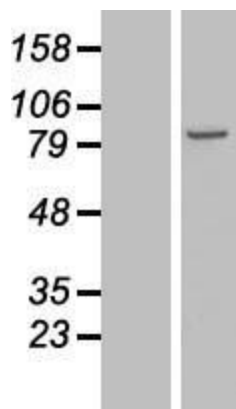
Product images:



Circular map for RC212790



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY WHSC1L1 (Cat# RC212790, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-WHSC1L1 (Cat# [TA810070])(1:2000). Positive lysates [LY413551] (100ug) and [LC413551] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413551]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212790 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).