

## Product datasheet for MR219815

### Nsd2 (NM\_001081102) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Nsd2 (NM\_001081102) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Nsd2  
**Synonyms:** 5830445G22Rik; 9430010A17Rik; AW555663; C130020C13Rik; D030027O06Rik; D930023B08Rik; mKIAA1090  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR219815 representing NM\_001081102  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGGAATTTAGCATCAGAAAAAGTCCTCTTTCTGTTTCAGAAAGTTGTAAGTGTCATGAAGATGAAGCAGA  
 CACCAGAAATCCTTGGCAGTGCAAATGGAAAGACTCAGAACTGTGAAGTGAATCATGAATGTTCTGTATT  
 CCTCAGCAAAGCTCAACTTTCTAACAGCCTACAGGAGGGGTCATGCAGAAATTTAATGGCCATGATGCG  
 CTCCTTTCTTCCAGCAGAGAAGTTGAAAGATCTTACTTCTTGTGTTTTAATGGAGAACCTGGTGCTC  
 ATGATACTAAATTGTGTTTTGAGGCCAGGAAGTAAAAGGAATGGGACACCACCAATACTACACCTAT  
 CAAAAATGGCTCTCCAGAAATTAACGAAATACCAAAACATACATGAATGGGAAACCTCTTTTGAA  
 TCTTCAATTTGTGGTGACGGTGCTGATGTGTCTCAGTCAGAAGAAAACGAACAAAACTGATAATA  
 AGACTAGGAGGAACAGGAAGAGGAGCATAAAAATGACTCTTTACTGGAGCAGGGCCTGTGGAAGCAGC  
 TTTAGTGTCCAAGATCTCAAGTCTGCAGATAAAAAGATTCCAGTTAAGAAGGAGTCTGTCCAAACTACT  
 GGCAGAGACAGAGACCTTTGTTAAAATACAACGTTGGTGATTTGGTGTGGTCCAAGTGTGAGTTACC  
 CTTGGTGGCCTTGCATGGTTTCTGCTGACCCACTCCTTCAACATACACCAAACTTAAAGGTCAGAAAA  
 AAGTGCACGCCAGTATCATGTACAGTCTTTGGTGATGCCCCAGAAAGAGCTTGGATATTTGAGAAGAGC  
 AAGCTGAGAAAAATCAAGTTGTTGAAACCTATTTGGGGAGATTGAGAGCCAGTGGGAAATGGGCATTGT  
 CCAAGCTGAGGAAGCTGCCAGCATGTCAATAGAGGAGCGGAAAGCCAAATTTACCTTCTTTATGTGGG  
 GACCAATTGCACCTCAACCCTCAAGTAGCTAAGGAGGCTGGCATTGTTACAGAACCTTTGGGAGAAATGG  
 TGGACTCTCAGGGGCCAGTGAAGAGGCTGCTGTAGACCCTGGGTCTGTGAGAGAAGAGGATATCCAC  
 GAAGAGAAGGCCAAGAACCAAAAGGCTAGTCTGCTGAGAACCAAGAAGGTGATCTGGCACAGACAAG  
 AGTACACCTCAAAGATGGCAGAGGCTGAACCTAAGCGAGGAGTAGGCTCTCTGCTGGGAGGAAAAAGT  
 CCACAGGCTCTGCTCCTCGGAGCAGGAAGGAGACTCAGCAGCCAGTTTTTGTCTTTTGTCAAAAACA  
 CAGAGATGAGTTGTAGCTGAACATCCAGATGCCTCAGGGGAAGAGATTGAAGAATTGCTTGGTCCCAG



[View online »](#)

TGGAGCATGCTCAATGAAAAGCAGAAAAGCAGATATAATACAAAGTTTTCCCTAATGATCTCTGCCAGT  
CTGAAGAAGACTCTGAAATGGGAATGGGAAAAAAGAAGCCACACAAAGAGAGCAGATGACCCTGCAGA  
GGATGTGGATGTTGAAGACGCGCCAGGAAAAGACTTAGAGCAGATAAGCACAGTCTTCGGAAGCAGAGA  
GAGACAATCACCGACAAAACGGCCAGAACAAGCTTTACAAGGCTATAGAGGCAGCTCCTCACTCAAGA  
GCCAGGCAGCAACGAAAAATTTGTCTGATGCTTGCACCCTGAAGAAGCGAAATCGGGCTTCTGCAAC  
AGCGTCTTCAGCACTTGGGTTTAAACAAAAGTTCATCTCCTTCTGCATCCTTAAGTGAAGTGAAGTCTCA  
GACAGCCAGGAGATGAACCATCAGAGTCCATATGAAAGTGCAGATGAAACACAGACTGAAGCATCCG  
TCTCATCTAAAAAATCTGAAAGAGGAATGGCTGCCAAAAAGGAGTACGTGTGCAGCTGTGTGAGAAGAC  
AGGCAGTCTTTACTGTGTGAGGGCCCTGTTGTGGAGCATTCCACCTAGCCTGCCTTGGACTTTCCCGA  
AGACCGGAAGGAAGATTCACCTGCACCGAATGTGCCTCAGGGATTCACCTCATGCTTCGTATGTAAAGAAA  
GCAAGATGGAGGTGAAACGTTGTGTGGTAAATCAGTGTGGAAAGTTTTACCATGAAGCCTGTGTAAGAAA  
ATACCCTCTCACTGTGTTTGAGAGCCGAGGCTTCCGCTGTCTCTCCATAGCTGTATGAGCTGCCATGCC  
TCCAACCTTCAAATCCACGGCCATCAAAGGTAAGTATGCGATGTGTCCGATGCCCGTTGCCTATC  
ATGGAGGGGATGCCTGTCTGGCAGCAGGATGTTCCGGTATTGCTTCTAACAGCATAATCTGCACAGGCCA  
CTTCACTGCCCGAAGGGGAAGCGGCACCATACCCATGTCAATGTGAGCTGGTGTCTTGTGTCTCCAAA  
GGGGGAAGCCTTCTGTGCTGTGAGGCCTGCCCAGCAGCCTTTCACCCGATTGTCTAAACATCGAGATGC  
CCGATGGTAGCTGGTTCTGCAACGATTGCCGGGCTGAAAAGAAGCTCCACTTTCAAGACATCATCTGGGT  
CAAATTTGGTAACTACAGATGGTGGCCGGCAGAAAGTTGCCATCCAAAAATGTTCCCCCAAATATTCAG  
AAAATGAAGCAGCAGATTGGAGAATTCCTGTATTTTTCTTTGGGTCTAAAGATTACTGAGCAGCATC  
AGGCACGAGTGTCCCATACATGGAGGGGGACCGGGCAGCCGCTACCAGGGGTGAGAGGGATCGGAAG  
AGTCTTCAAGAACGCATTGCAAGAAGCTGAAGCTCGTTTTAATGAAGTCAAACCTCAGCGGGAAGCCCGA  
GAAACACAGGAGAGTGAGAGAAAGCCTCCACCATAACAAGCATATCAAGGTGAATAAACCTTATGGTAAAG  
TCCAGATCTACACAGCTGACATTTCTGAAATCCCGAAGTGAACCTGTAAGCCACAGATGGAACCCCTG  
TGGCTCTGATTCAGAGTGTCTGAACAGGATGCTAATGTTTGAGTGCCACCCGAGGTGTCTCTGCAGGG  
GAATACTGCCAGAACCAGTGTTCACATAAGCGCCAGTACCCTGAGACCAAGATCATCAAGACAGATGGCA  
AAGGGTGGGGCTGGTTGCCAAAAGGGACATCAGAAAAGGAGAATTTGTTAATGAGTATGTTGGTGAAGT  
GATTGATGAAGAGGAGTGTATGGCAAGAATCAAATATGCACATGAGAATGACATCACTCACTTCTACATG  
CTCACCATAGACAAGGACCGCATAATTGATGCTGGCCCCAAAGGGAAATTTACGATTCATGAACCATA  
GCTGCCAGCCCAATTGTGAGACCCTGAAGTGGACAGTGAATGGGACACACGGGTGGCCTGTTTGTGTG  
GTGTGACATTCTGCAGGTACAGAGCTGACTTTCAACTATAACCTTGATTGTTTGGCAATGAAAAGACA  
GTCTGTGGTGTGGAGCCTCAACTGTAGTGGGTTCTTGGAGACAGACCAAGACATCAGCATCCCTTT  
CATCAGAGGAAAAGGGTAAAAAGGCCAAGAAGAAAACCAGAAGGCGCAGAGCCAAGGGTGAAGGAAAACG  
GCAGTCAGAGGATGAGTGCTTCCGCTGTGGTGTGGTGGGCGAGCTGGTGTGTGTGACCGCAAGTTCTGT  
ACCAAGGCCTACCACCTATCCTGCCTCGGTTTGGGCAAGCGGCCCTTGGGAAGTGGAAATGTCCTTGGC  
ATCACTGTGATGTATGTGGCAAACCTTCTACCTCATTTTGCCACCTCTGCCCAACTCATTCTGTAAAGGA  
ACACCAAGATGGGACTGCTTCCGTTCCACCCAGGATGGGCGTCTACTGCTGTGAGCATGACTTGAGG  
GCAGACTCTTCAAGTAGCACCAAGACTGAGAAACCCTTCCAGAATCACTGAAGTCAAAGGAAAGAGGA  
AGAAAAGGCGGTGCTGGCAAGGGTCACAGATGGCAAA

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >MR219815 representing NM\_001081102  
 Red=Cloning site Green=Tags(s)

MEFSIRKSPLSVQKVVKCMKMQTPEILGSANGKTQNCENVHECSVFLSKAQLSNSLQEGVMQKFNHDA  
 LPFLPAEKLKDLTSCVFNGEPGAHDTKLCFEAQEVKIGITPPNTPPIKNGSPEIKLKITKTYMNGKPLFE  
 SSICGDGAADVSOSEENEQKSDNKTRNRKRKSIKYDSLLEQGLVEAALVSKISSPADKKIPVKKESCNP  
 GRDRDLLLKYNVGDLVWSKVSGYPWPCMVSAADPLLHNHTKLGKQKKSARQYHVQFFGDAPERAWIFEKS  
 LVAFEGEEQFEKLCQESAKQAPTKAEKIKLLKPI SGRLRAQWEMGIVQAEAAASMSIEERKAKFTFLYVG  
 DQLHLNPQVAKEAGIVTEPLGEMVDSSGASEAAVDPGVSREEDIPTKRRRRTRKRSSAENQEGDPGTDK  
 STPPKMAEAEPKRGGVSPAGRKKSTGSAPRSRKGDSAAQFLVFCQKHRDEVVAEHPDASGEEIEELLGSQ  
 WSMLEKQKARYNTKFLMISAQSEEDSGNGGKRSHTKRADPAEDVDVEDAPRKRLRADKHSRLRQR  
 ETITDKTARTSSYKAI EAASSLKSQAATKNLSDACKPLKRNRSATASSALGFNKSSSPASL TEHEVS  
 DSPGDEPSESPYESADETQTEASVSSKKSERGMAAKKEYVCQLCEKTGSLLLCEGPCCGAFHLACLGLSR  
 RPEGRFTCTECASGIHSCFVCKESKMEVKRCVVNQCGKFYHEACVKKYPLTVFESRGRFRCPLHSCMSCHA  
 SNPSNRPSPKGMRCVRCVAYHGGDACLAAGCSVIASNSI ICTGHFTARKGKRHHTHVNSWCFVCSK  
 GGSLLCCEACPAAFHPDCLNIEMPDGSWFCNDCRAGKCLHFQDI IWWKLGNYRWWPAEVCHPKNVPNIQ  
 KMKHEIGEFPPVFFFGSKDYWTHQARVFPYMEGDRGSRVQGVGRVGRVFNALQEAEARFNEVKLQREAR  
 ETQESERKPPPYKHIVNKPYGKVIYTDISEIPKCNCKPTDENPCGSDSECLNRMLMFECHPQVCPAG  
 EYCQNQCFTKRQYPETKI IKTGKGWGLVAKRDIRKGEFVNEYVYVGELEDEECMARIKYAHENDITHFYM  
 LTIDKDRIIDAGPKGNYSR FMNHSCQPN CETLKWTVNGDTRVGLFAVCDIPAGTELTFNYNLDCLGNEKT  
 VCRGASNCSGFLGDRPKTSASLSSEKGGKAKKTRRRRAKGEGRQSEDECFRCGGQLVLCDRKFC  
 TKAYHLSCLGLGKRPF GKWECPWHHC DVCCKPSTSFCHLCPNSFCKEHQDGTAFRSTQDGSYCEHDLR  
 ADSSSSTKTEKPFPELSKSGKRRKRRCWRRVTDGK

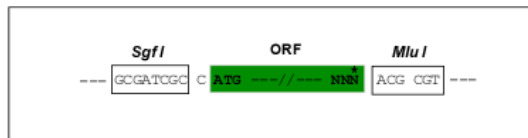
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

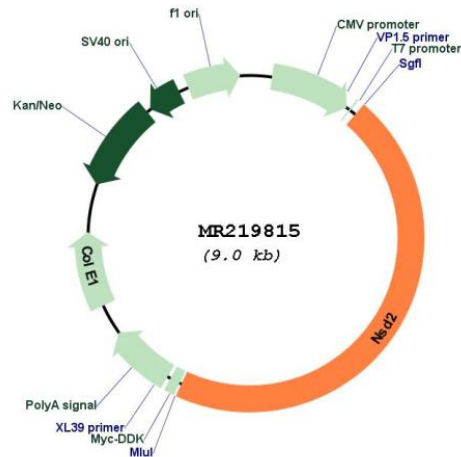
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_001081102

ORF Size: 4098 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.

RefSeq: [NM\\_001081102.2](#), [NP\\_001074571.2](#)

RefSeq Size: 6936 bp

RefSeq ORF: 4101 bp

Locus ID: 107823

UniProt ID: [Q8BVE8](#)

**Cytogenetics:** 5 B2

**MW:** 152.8 kDa

**Gene Summary:** Histone methyltransferase with histone H3 'Lys-27' (H3K27me) methyltransferase activity.  
[UniProtKB/Swiss-Prot Function]