

Product datasheet for **RC223278**

DMRT2 (NM_181872) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DMRT2 (NM_181872) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DMRT2
Synonyms:	DSXL-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC223278 representing NM_181872
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCCGACCCGACGGCTGGCTCCGCGGCCGGGACTGGGAGATCGATGTGAGAGCCTGGAGCTGGAAG
 AGGACGTCTGCGGGCGCCGCGGTCCACGCCCCCGGGCCAGCCCGCCCGCGGACGGGGACTGCGA
 GGACGACGAAGATGACGACGGGTGGACGAAGACGCGGAAGAAGAGGGCGACGGCGAGGAGCGAGCGCG
 TCCCCGGGATGCCCGCCAGCCGGAGCAGCGGGGGGACCGAGCCGAGGCCGCGCTCGCGCCTCAGG
 CCTCACCCGCGGCACCGGTCCCGAGAGCGCTGCACTCCCGGGCGCGCGCGGAGCCGCGCAAGCT
 GAGCCGACGCCAAGTGCAGCGCTGCCGAACCACGGCGTGGTGTCTGCCTGAAGGGCCACAAGCGC
 TTCTGTCGCTGGCGGACTGCCAGTGCGCCAAGTGCCTGCTGGTGGAGCGGCAGCGCTCATGGCCG
 CCCAGGTGGCGCTCCGGAGGCAGCAGGCCACCGAGGACAAGAAGGGGCTTCCGGGAAACAGAATAATTT
 CGAGCGCAAAGCTGTGTACCAGAGGCAAGTCAGAGCCCCAGTTTCTGGCCAAAAGCATTTTAGAAGGC
 TATCGCCCCATTCCAGCGGAGACTTATGTAGGAGGGACCTTCCCTCTACCTCCCCAGTTAGTGACAGGA
 TGAGGAAAAGAAGAGCCTTTGCTGATAAAGAGTTGGAGAACATTATGCTGGAGAGAGAATAAAAGAAA
 GGAGATGTTGAAACTTCTCAAGCTGCTGCTGTTTTCTGCCAACCGCATGGTGCCTGGACCTGACTAC
 AATTCCTACAAAAGTGCCTACAGCCCCAGCCAGTGGAACCACCAAGCAAGGACTTCTGTAATTTTTTGC
 CCACCTGCCTTGATTTAACCATGCAAGTATTCAGGGTCTGGGAATATGGAATAATTTCTTCTAATGTCAG
 CGTGGGCACAACCTATAGACAGTATCCCTTGTCTCAAGATTTTTAGTTTGGCCCAAGTGTGGCCCCATT
 AGCGACACCCTCCTCTACCAGCAATGCCTGCTAAATGCCACCCTCAGTTCAGCCCTGAAGCATGGGG
 CCAGCTGGGACTTGAAGGGAGCAGCAGTCCAGGATGGACTCAGTGCAGAGCAGGACATGATGCCATCGAA
 ATTGGAAGGTTCCCTGGTGCCTCACACTCCTGAGATCCAGACCACGAGAAGTACCTTCAGGGTTCAT
 CAGGCTGTCCAGAGAGTCCGCTTCTCCCCACCCGACGGAATTTCTCTCCATTGTTGACACGGACT
 CCCTGGCAGCTCAAGGCATGTCTTAACGAAGATCAGCAAAGAAAACACCAGGCACCCTCTGCCACTTAG
 ACATAATCCATTCCTACTATTCCAGCAAACACTTACTGACAAATCGGGTCTGAGTTGAAAACACCA
 TTTGTCAAAGAGGCTTTGAAGAGACCCCTAAGAAACACAGAGAGTGTAGTTAAGGACAACAGAAAGT
 ACACATTTACAATAGATAGATGTGCAAAAGACCTTTTTGTAGCCAAACAAGTTGGAACAAAACCTCTCGGT
 GAATGAACCACTGCATTTCTGTTGAGTCTATTCTTAAGAGGCCTTCATCTGCCATCACTCGTGTCTCT
 CAG

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223278 representing NM_181872
 Red=Cloning site Green=Tags(s)

MADPQAGSAAGDWEIDVESLELEEDVCGAPRSTPPGPSPPPADGDCEDDEDDGVEDAEIEEGDGEIEAGA
 SPGMPPQPEQRGGPQPRPPLAPQASPAGTGPRERCTPAGGGAEPKLSRTPKCARCRNHGVVSLKGHKR
 FCRWRDCQCANLLVVERQVRVMAAQVALRRQATQEDKKGLSGKQNNFERKAVYQRQVRAPSLAKSILEG
 YRPIPAETVYGGTFPLPPVSDRMRKRRAFADKELENIMLEREYKEREMLETSQAAALFLPNRMVPGDY
 NSYKSAYSPPVEPPSKDFCNFLPTCLDLTMQYSGSGNMELISSNVSVGTTYRQYPLSSRFLVWPCKGPI
 SDTLLYQQCLLNATTSVQALKHGASWDLKGARVQDGLSAEQDMMPKLEGLVLPHTPEIQTTTRSDLQGH
 QAVPERSAFSPRRNFSPDIVDTSLAAQGHVLTAKISKENTRHPLPLRHNPFHSLFQQTLTDKSGPELKTP
 FVKEAFEETPKKHRECLVKDNQYFTTIDRCAKDLFVAKQVGTKLSVNEPLSFSVESILKRPSSAITRVS
 Q

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1127_e04.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_181872

ORF Size: 1683 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

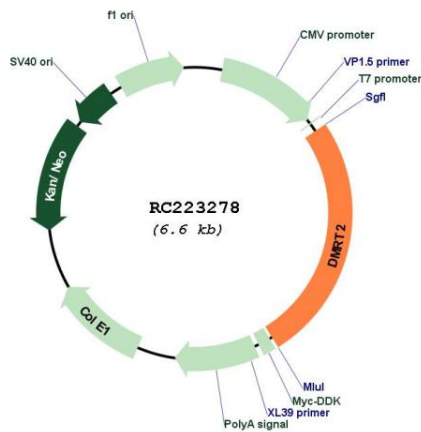
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

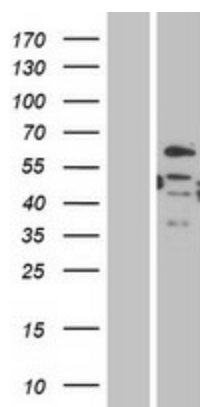
RefSeq: [NM_181872.1, NP_870987.1](#)
RefSeq Size: 1969 bp
RefSeq ORF: 1686 bp
Locus ID: 10655
UniProt ID: [Q9Y5R5](#)
Cytogenetics: 9p24.3
Protein Families: Transcription Factors, Transmembrane
MW: 61.6 kDa

Gene Summary: The protein encoded by this gene belongs to the DMRT gene family, sharing a DM DNA-binding domain with *Drosophila* 'doublesex' (dsx) and *C. elegans* mab3, genes involved in sex determination in these organisms. Also, this gene is located in a region of the human genome (chromosome 9p24.3) associated with gonadal dysgenesis and XY sex reversal. Hence this gene is one of the candidates for sex-determining gene(s) on chr 9. [provided by RefSeq, Apr 2010]

Product images:



Circular map for RC223278



Western blot validation of overexpression lysate (Cat# [LY405565]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223278 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).