

## Product datasheet for **RG223278**

### DMRT2 (NM\_181872) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DMRT2 (NM_181872) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DMRT2
Synonyms:	DSXL-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG223278 representing NM\_181872  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGACCCGACGGCTGGCTCCGCGGCCGGGACTGGGAGATCGATGTGAGAGCCTGGAGCTGGAAG  
 AGGACGTCTGCGGGCGCGCGGTCCACGCCCCCGGGCCAGCCCGCCCGCGGACGGGGACTGCGA  
 GGACGACGAAGATGACGACGGGTGGACGAAGACGCGGAAGAAGAGGGCGACGGCGAGGAGGACGGCGG  
 TCCCCGGGATGCCCGGCCAGCCGGAGCAGCGGGGGGACCGCAGCCGAGGCCGCGCTCGCGCCTCAGG  
 CCTCACCCGCGGCACCGGTCCCGGAGAGCGCTGCACTCCCGGGCGCGCGCGGAGCCGCGCAAGCT  
 GAGCCGACGCCCAAGTGCAGCGCTGCCGAACCACGGCGTGGTGTCTGCCTGAAGGGCCACAAGCGC  
 TTCTGTCGCTGGCGGACTGCCAGTGCGCCAATGCCTGCTGGTGGAGCGGCAGCGCTCATGGCCG  
 CCCAGGTGGCGCTCCGGAGGCAGCAGGCCACCGAGGACAAGAAGGGGCTTCCGGGAAACAGAATAATTT  
 CGAGCGCAAAGCTGTGTACCAGAGGCAAGTCAGAGCCCCAGTTTCTGGCCAAAAGCATTTTAGAAGGC  
 TATCGCCCCATTCCAGCGGAGACTTATGTAGGAGGGACCTTCCCTCTACCTCCCCAGTTAGTGACAGGA  
 TGAGGAAAAGAAGAGCCTTTGCTGATAAAGAGTTGGAGAACATTATGCTGGAGAGAGAATAAAAGAAA  
 GGAGATGTTGAAACTTCTCAAGCTGCTGCTGTTTTCTGCCAACCGCATGGTGCCTGGACCTGACTAC  
 AATTCCTACAAAAGTGCCTACAGCCCCAGCCAGTGGAACCACCAAGCAAGGACTTCTGTAATTTTTTGC  
 CCACCTGCCTTGATTTAACCATGCGATATTCAGGGTCTGGGAATATGGAACATAATTTCTTAATGTCAG  
 CGTGGGCACAACCTATAGACAGTATCCCTTGCTCAAGATTTTAGTTTGGCCAAAGTGTGGCCCCATT  
 AGCGACACCCTCCTACCAGCAATGCCTGCTAAATGCCACCCTCAGTTCAAGCCCTGAAGCATGGGG  
 CCAGCTGGGACTTGAAGGGAGCAGCAGTCCAGGATGGACTCAGTGCAGAGCAGGACATGATGCCATCGAA  
 ATTGGAAGGTTCCCTGGTGCCTCACACTCCTGAGATCCAGACCACGAGAAGTGACCTTCAGGGTTCAT  
 CAGGCTGTCCAGAGAGTCCGCTTCTCCCCACCCGACGGAATTTCTCTCCATTGTTGACACGGACT  
 CCCTGGCAGCTCAAGGGCATGTCTTAACGAAGATCAGCAAAGAAAACACCAGGCACCCTCTGCCACTTAG  
 ACATAATCCATCCACTCATTATCCAGCAAACACTTACTGACAAATCGGGTCTGAGTTGAAAACACCA  
 TTTGTCAAAGAGGCTTTGAAGAGACCCCTAAGAAACACAGAGAGTGTAGTTAAGGACAACAGAAAGT  
 ACACATTTACAATAGATAGATGTGCAAAAGACCTTTTGTAGCCAAACAAGTTGGAACAAAACCTCGGT  
 GAATGAACCACTGCATTTCTGTTGAGTCTATTCTTAAGAGGCCTTCATCTGCCATCACTCGTGTCTCT  
 CAG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG223278 representing NM\_181872  
 Red=Cloning site Green=Tags(s)

MADPQAGSAAGDWEIDVESLELEEDVCGAPRSTPPGPSPPPADGDCEDEDDDGVEDAEEEEGDGE EAGA  
 SPGMGPQPEQRGGPQPRPLAPQASPAGTGPRERCTPAGGGAEPKLSRTPKCARCRNHGVVSLKGHKR  
 FCRWRDCQCANCLLVVERQRMVAQVALRRQATEDKKGLSGKQNNFERKAVYQRQVRAPSLAKSILEG  
 YRPIPAETVYGGTFPLPPVSDRMRKRAFADKELENIMLEREYKEREMLETSQAAALFLPNRMVPGPDY  
 NSYKSAYSPPVEPPSKDFCNFLPTCLDLTMQYSGSGNMELISSNVSVGTTYRQYPLSSRFLVWPCKGPI  
 SDTLLYQQCLLNATTSVQALKHGASWDLK GARVQDGLSAEQDMMPKLEGLVLPHTPEIQTTTRSDLQGH  
 QAVPERSAFSPRRNFSPIVDTSLSAAQGHVLTKISKENTRHPLPLRHNPFHSLFQQTLTDKSGPELKT  
 FVKEAFEETPKKHRECLVKDNQYFTTIDRCAKDLFVAKQVGTKLSVNEPLSFSVESILKRPSSAITRVS  
 Q

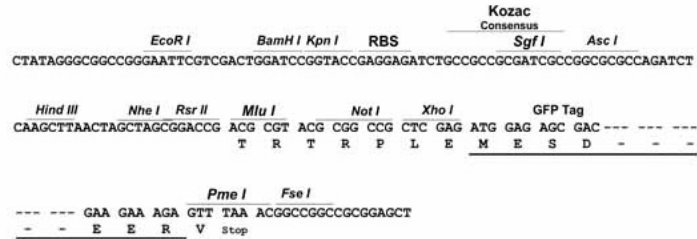
**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

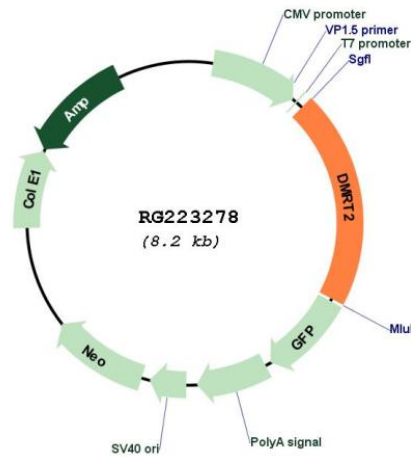
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_181872  
 ORF Size: 1683 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<p><a href="#">NM_181872.1</a>, <a href="#">NP_870987.1</a></p>
<b>RefSeq Size:</b>	<p>1969 bp</p>
<b>RefSeq ORF:</b>	<p>1686 bp</p>
<b>Locus ID:</b>	<p>10655</p>
<b>UniProt ID:</b>	<p><a href="#">Q9Y5R5</a></p>
<b>Cytogenetics:</b>	<p>9p24.3</p>
<b>Protein Families:</b>	<p>Transcription Factors, Transmembrane</p>
<b>Gene Summary:</b>	<p>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]</p>