

Product datasheet for RC208108

DMRT1 (NM 021951) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: DMRT1 (NM_021951) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: DMRT1

Synonyms: CT154; DMT1 **Mammalian Cell**

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL) **ORF Nucleotide** >RC208108 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

> TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC

> ATGCCCAACGACGAGGCATTCAGCAAGCCCTCTACACCGTCGGAAGCCCCTCACGCCCCCGGGGTACCGC CGGGGGCAGCAGCAGAGGAGGCGCTCCGGCTCCGGGCGTCGGACCTGGGTGCCGGGAGCAAGAAGTCC CCGCGGCTGCCCAAGTGCGCACGCTGCAGGAACCACGGCTACGCCTCGCCGCTCAAGGGCCACAAGCGCT TCTGCATGTGGCGCGACTGCCAGTGCAAGAAGTGCAACCTGATCGCCGAGAGGCAGCGCGTGATGGCCGC GCAGGTGGCCCTGAGAAGGCAGCAGGCCCAGGAGGAGGAATTGGGTATCAGCCACCCCATCCCACTGCCC AGTGCGGCCGAGCTGCTTGTCAAAAGAGAGAACAATGGCAGTAACCCGTGCCTCATGACTGAGTGCAGTG GCACCTCTCAGCCACCGCCGGCCAGTGTCCCCACCACTGCAGCTTCAGAGGGACGTATGGTCATCCAGGA TATTCCTGCTGTCACCAGCAGAGGGCATGTGGAGAACACACCTGACCTGGTTTCAGACTCCACCTACTAC AGCAGCTTCTACCAGCCGTCTCTGTTTCCTTATTACAACAATCTATACAACTGCCCGCAGTACTCCATGG CCTTGGCTGCTGATTCTGCTTCTGGGGAGGTGGGAAATCCCCTCGGGGGATCCCCTGTGAAGAACAGCCT TCGGGGCCTCCCCGGACCTTATGTGCCTGGTCAGACAGGAAACCAGTGGCAGATGAAGAACATGGAGAAC TGCCCCAGTTCTTCACTTTTGAGGATGCTCCCTCTTACCCGGAAGCCAGGGCGAGCGTATTCTCGCCGCC CAGCAGTCAAGATTCTGGCTTGGTTTCCCTCTCGAGCAGCTCTCCTATTAGTAACAAGAGCACAAAGGCA GTGCTTGAATGTGAGCCTGCGTCGGAGCCCAGCAGCTTCACAGTCACTCCCGTCATCGAGGAGGACGAG

> **ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208108 protein sequence

Red=Cloning site Green=Tags(s)

MPNDEAFSKPSTPSEAPHAPGVPPQGRAGGFGKASGALVGAASGSSAGGSSRGGSGSGASDLGAGSKKS PRLPKCARCRNHGYASPLKGHKRFCMWRDCQCKKCNLIAERQRVMAAQVALRRQQAQEEELGISHPIPLP SAAELLVKRENNGSNPCLMTECSGTSQPPPASVPTTAASEGRMVIQDIPAVTSRGHVENTPDLVSDSTYY SSFYQPSLFPYYNNLYNCPQYSMALAADSASGEVGNPLGGSPVKNSLRGLPGPYVPGQTGNQWQMKNMEN RHAMSSQYRMHSYYPPPSYLGQSVPQFFTFEDAPSYPEARASVFSPPSSQDSGLVSLSSSSPISNKSTKA VLECEPASEPSSFTVTPVIEEDE

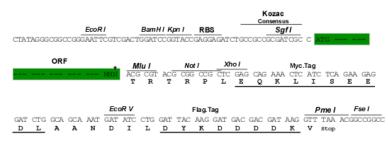
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6348 a05.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_021951

ORF Size: 1119 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: <u>NM 021951.3</u>

 RefSeq Size:
 2229 bp

 RefSeq ORF:
 1122 bp

 Locus ID:
 1761

 UniProt ID:
 Q9Y5R6

 Cytogenetics:
 9p24.3

Protein Families: Druggable Genome, Transcription Factors

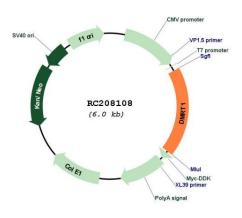
MW: 39.5 kDa

Gene Summary: This gene is found in a cluster with two other members of the gene family, having in common

a zinc finger-like DNA-binding motif (DM domain). The DM domain is an ancient, conserved component of the vertebrate sex-determining pathway that is also a key regulator of male development in flies and nematodes. This gene exhibits a gonad-specific and sexually dimorphic expression pattern. Defective testicular development and XY feminization occur

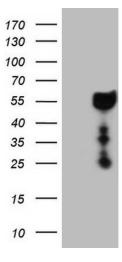
when this gene is hemizygous. [provided by RefSeq, Jul 2008]

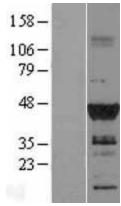
Product images:

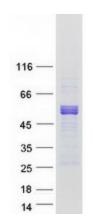


Circular map for RC208108









HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DMRT1 (Cat# RC208108, 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-DMRT1 (Cat# [TA807746])(1:2000). Positive lysates [LY411862] (100ug) and [LC411862] (20ug) can be purchased separately from OriGene.

Western blot validation of overexpression lysate (Cat# [LY411862]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208108 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified DMRT1 protein (Cat# [TP308108]). The protein was produced from HEK293T cells transfected with DMRT1 cDNA clone (Cat# RC208108) using MegaTran 2.0 (Cat# [TT210002]).