

## Product datasheet for MC223833

### Tdrd1 (NM\_001002238) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tdrd1 (NM_001002238) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tdrd1
Synonyms:	MTR-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223833 representing NM_001002238 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGATGCCACGGAATAATTTGGAAGCCTCTACTTGTA AAAATGGCAGAGCCATTTAATTTTGAGAAGAAGG  
AAAGCAAGCCCCGCCCCAGGACCCTCTCAGAAGTCTGTAGCACAGCATAACCACCCACCTTCAGGCT  
GAAAAGCCAGAGAACGGGAATACAAGAACAACCTTTTTGCTTTGTGAACAAAACAAACAGTATTTAGCT  
AGTCAGGAGGACAGTTCCGGTGGTCTCTTCAAACCTGCTGTTGTCAATGGAGAAGTCGGTGGGTCCAAAG  
GAGACAGGAAGCCGCCACCAACAGGAAACCCAGTGTCAACATTAAGTCTTGGAACAGTTACCTCTAA  
CCAAGTAAAACTAAGCCAGCAGTAATGTGACTCCTGAAAAATCAAAAAATCTCACAAGTTGTTTGAG  
AATGCCTGTCCGTAATAATCCAGCACTCTTCAACTCGTTAGGACCGCCCTTCGGTCAACAACCTGCC  
ACCGCTGTGGCCTGTTGGGTGCTGAGGTGCTCCAGTGCAAGCAGACGTA ACTACTGCTCCACGGCCTG  
CCAGAGGAGAGACTGGTCTTCCACAGCACCATCTGTAGGCTGTACAGCAAAGTTGAACAAGCTTGAA  
GATAATAAATCACCATTTGAAACAAAGGCCATTGAAGTGAAGAGTGAGGTTGACTGTCCCCGGGAGTTA  
CTAAAGAAATAACAGCGGTGCTGAGAGAGTAATGTTCTCTGATTTGAGAAGTCTCCAACCTCAAGAAAAC  
CATGGAGATAAAGGGTACAGTTACTGAATTC AAGCACCCGAGTAACCTTTATATCCAGTTGTATTCTTCA  
GAGGTTCTAGAAAACATGAACCACTCTCTACAAGCTTGAAGAGACATATGCAATGTGGTGCCTGAAG  
ATGTTATCTTCTGTTAAGGGGAAGTTGTGTTGCCAAATACACAGTTGATCAGACCTGGAACAGAGC  
CATAGTACAAGCCGTGGATGTGCTGCAGAGGAAGGCCACGTCTGTACATTGACTATGGGAACGAGGAG  
ATGATCCCAGTACAGCGTTCACCCGCTGAGCAGAGGCCTTGACTTGTTTCTCTCTTCTGCCATAAAGT  
GCTGTGTGTCAGGCGTCATCCCACTGCGGGCAGTGGAGTGAAGGCTGTGTTGCAGCTGTCAAGGCCCT  
TCTGTTTGAGCAGTTCTGCTCTGTCAAGGTCATGGACATCTTAGAGGAGGAGTACTCACCTGTGCCGTT  
GACCTTGTCTACAGAGCTCAGGAAAGCAGCTGGACCATGTGCTGGTGGAAATGGGGTATGGAGTGAAC  
CCGGTGAGCAGAGCTCCACGGAGCAGAGTGTGGACCACAGTGCATTGGAGGACGTTGGAAGAGTGACAGT  
TGAGAGCAAGATTGTGACAGACGAAATGCCCTGATCCCCAAAGTGTGACTTTGAATGTGGGTGATGAG  
TTCTGTGGCGTGGTTGCCACATCCAGACACCAGAGGACTTCTTTGTCAGCAGCTGCAGAGCGGCCACA



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AGCTTGCGGAGCTTCAGGAATCCCTCAGTGAATACTGTGGCCATGTGATTCCACGCTCTGACTTTTATCC
AACCATTGGGGACGTGTGCTGTGCTCAGTTCTCAGAGGATGATCAGTGGTACCGCGCCTCGGTTCTGGCC
TACGCTTCTGAAGAATCTGTCCTGGTTGGATATGTCGATTATGGGAACCTTGAGATTCTCAGTCTGAAAA
GACTTTGTCCCATAATCCAAAGTTGTTGGATTGGCCGATGCAAGCTCTAAATTGTGTGCTGGCAGGCGT
GAAGCCATCATTAGGAATTTGGACTCCAGAAGCTGTGTGTGTATGAAAGAGATGGTACAGAACAGGATG
GTCACAGTGAGAGTGGTGGGCATGCTGGGACCAGGGCCCTGGTGGAGCTCATCGACAAGTCGGTGGCTC
CTCAGCTCAGCGCTTCTAAAGCTCTCATAGACTCGGGCTTTGCCATCAAAGAAAAGGACGTTGGCAGATAA
AGGCAGCAGTATGCACACAGCCAGTGTTCCTTGGCCATTGAAGGTCCAGCAGAGGCGTTGGAGTGGACG
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ACTGCCACTTTCTAAAGATGATGCCTTAGAGAAGCTCGATGACTTGAATCAGTCCTTAGCAGACTACTG
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TCAGGGGATGCAGTGTGCTAGTAGATATACAGCCCCAAACAAGCATTGGACAAAAGAGGCCACAGCA
AGATTTCAAGCATGTGTTGTGGGCTCAAACCTCAAGCCAGAGTTGTGGAATCACCAGCAACGGCGTGG
GGTGGAGCTCACCGATCTTCCACTCCTTACCCAAAATCATTAGTGATGTGCTCATCAGAGAGCAGTT
GGTCTTAAGGTGTGGTTCACCACAGGACTCACTGATGAGCAGACCTGCTAATCAACATAAGCAGATCGAC
AGCCACAGGGTGAAGCCAGCCCTTTCAGCAGAGCAGTGAAGACAATGGAATTGCCAGTTAAACAAGACTA
TAGCAGCAATGTACTAGAGATCATAAGCCAGCCTTGTCTACGCCATCCCCAGTGAATGTCAGAAAA
TCAAGAGAAGCTGTGTGTGTAGCAGCTGAATTGTTAGAACACTGTAATGCTCAGAAGGGCCAGCCAGCC
TACAGACCACGGACCGGCGACCGTGTGTGCTAAGTACACAAATGATGACTTCTGGTACCGGGCCATTG
TTCTGGAACGTGCGAATCTGATGTGAAAGTTCTCTACGCAGATTATGGAACATCGAAACCTGCCTCT
TTCCAGAGTGCAGCCCATCCCAGCCAGCCACTGGAGCTGCCCTCCAGATCATTAGATGCTCACTAGAG
GGGCCGATGGAGCTGAATGGAAGCTGTTCCGAGTTAGTGATGGAGCTGCTGAGAAATGCCATGCTGAACC
AGAGTGTGGTCTCTCTGTGAAAGCCATTTCAAAGAATGTCCACGCAGTGTGAGTTGAAAAATGTTCTGA
GAACGGAATGATCAATATAGCTGAGAATCTGGTGTGTGTGGCCTGGCAGAAAACCTCACTTCTAAAAGG
AAAAGTGTCTCCACTAAAGAGATACCACACAGCAGAGACTGCTGTTGCACAGAGTTACAGAAACAGATTG
AGAAACACGAACAGATTCTCTCTTCTTAAACAATCCAACCAACAAAGTAAATTCACAGAGATGAA
AAAGCTGCTGAGAAGTAA
    
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ACGGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGA
TTACAAGGATGACGACGATAAAGTTTAA
    
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- Restriction Sites:** SgfI-NotI
- ACCN:** NM\_001002238
- Insert Size:** 3519 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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\\_001002238.2](#), [NP\\_001002238.1](#)

**RefSeq Size:** 4914 bp

**RefSeq ORF:** 3519 bp

**Locus ID:** 83561

**UniProt ID:** [Q99MV1](#)

**Cytogenetics:** 19 D2

**Gene Summary:** Plays a central role during spermatogenesis by participating in the repression transposable elements and preventing their mobilization, which is essential for the germline integrity. Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons. Required for the localization of Piwi proteins to the meiotic nuage. Involved in the piRNA metabolic process by ensuring the entry of correct transcripts into the normal piRNA pool and limiting the entry of cellular transcripts into the piRNA pathway. May act by allowing the recruitment of piRNA biogenesis or loading factors that ensure the correct entry of transcripts and piRNAs into Piwi proteins. [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) differs in the 5' UTR compared to variant 3. All four variants encode the same protein. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.