

## Product datasheet for **RG209791**

### DMTF1 (NM\_021145) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DMTF1 (NM_021145) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DMTF1
Synonyms:	DMP1; DMTF; hDMP1; MRUL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG209791 representing NM\_021145  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGCACAGTGGAAAGAGGATTCTGACACAGTAACAGTAGAAACTGTGAACTCTGTGACTTTGACTCAGG  
 ACACAGAAGGGAATCTCATTCTTCACTGCCCTCAGAATGAAGCGGATGAAATAGACTCAGAAGATAGTAT  
 TGAACCTCCACATAAAAAGGCTTTGTTTGTCTCTGAGGATGATCAGAGTATTGATGATTCTACTCCTTGC  
 ATATCAGTTGTTGCACTTCCACTTTCAGAAAATGATCAGAGCTTTGAAGTGACCATGACTGCAACCCACAG  
 AAGTAGCAGATGATGAGGTTACTGAGGGGACTGTGACACAGATACAGATTTTGCAGAATGAGCAACTAGA  
 TGAAATATCTCCCTTGGTAACGAGGAAGTTTCAGCAGTTAGCCAAGCATGGTTTACAATAAAGAAGAT  
 AAGGATTCTCTGACTAATAAAGGACATAAATGGAAGCAGGGGATGTGGTCCAAGGAAGAAATGATATTT  
 TGATGAACAATATTGAACGCTATCTTAAGGCACGCGGAATAAAGATGCTACAGAAATCATCTTTGAGAT  
 GTCAAAAGACGAAAGAAAAGATTTCTACAGGACTATAGCATGGGGTCTGAACCGCCTTTGTTTGCAGTT  
 TATAGAAGAGTGTCTCGCATGTATGATGACAGAAACCATGTGGGAAAATATACACCTGAAGAAAATTGAGA  
 AGCTCAAGGAGCTCCGGATAAAGCATGGCAATGACTGGGCAACAATAGGGGCGGCCCTAGGAAGAAGTGC  
 ATCTTCTGTCAAAGATCCGGTCCGACTGATGAAGGATACTTGCAACACAGGGAAGTGACAGAGAAGAAGAA  
 GAAAAGAGACTTGCAGAAGTGGTTCATGAGTTGACAAGCACTGAGCCAGGTGACATAGTCACACAGGGTG  
 TGTCTTGGGCAGCTGTGGCTGAACGAGTCGGTACCCGCTCAGAAAAGCAATGTCGTTCTAAATGGCTCAA  
 CTACCTGAATTGGAACAGAGTGGGGTACTGAATGGACCAAGGAAGTGAATCAATCTCATCCTCAGG  
 ATAGCAGAACTTGATGTAGCTGATGAAAATGACATTAAGTGGGATCTGTTAGCTGAGGGATGGAGTAGTG  
 TCCGTTCCACCACAATGGCTACGAAGTAAATGGTGGACCATAAAAAGGCAAAATGCAAACCATAAGGATGT  
 TTCGTTCCCTGTCTTAATAAAGGTCTTAACAGTTACATGAGAACCACAAAAACAACCCCAACGCTTTTG  
 GAGAATAAATCAGGATCTGGAGTTCAAACAGTAAATACCAATTCCAGTGTGCAGCATGTTTCAGATAAGAG  
 TTGCCCGCTTGGAAAGATAATACAGCCATCTCTTAGCCCATGGCAGCATTGCAGATTCCAGTCCAGAT  
 CACCCATGTTTCTTACAGCAGACTCTCCTGCTACCGTTGACTCAGAAACAATAACACTAAACAGTGGAAACA  
 CTACAGACATTTGAGATTCTTCCCTCTTCCATCTACAGCCACTGGCACTCCAGGCACCTACCTACTTC  
 AAACAAGCTCAAGCCAAGGCCTTCCCCTAACTCTGACTGCTAGTCCCACAGTAACCCTGACAGCTGCTGC  
 TCCTGCTTCTCCTGAACAGATTATTGTTTCATGCTTTATCCCAGAACATTTGTTGAACACAAGTATAAT  
 GTTACAGTGCAGTGTACACACCAAGAGTCATCATTGACTGTTGCCACAGAGGACATCACTTCTTCCA  
 TATCCCAAGCAGAACTGACAGTCGATAGTATTCAGTATCTGATTTTCCCTGAGCCTCCAGACGCCCT  
 AGAAGCAGACACTTTCCAGATGAAGTTCATCACCCCTAAGATGACTGTGGAGCCATCATTTAATGATGCT  
 CATGTATCCAAATTCAGTGACCAAAATAGCACAGAAGTATGATGATGTTATGGTTCAGAACAGAAGAAG  
 AAATCTCTGACACCGACCTTAAACAAGAGGAATCACCCCTGATTTAGCCAGTGTATGTTACTGAGGG  
 TTTAGAGTCTCCCACTATAGAAGAACAAGTTGATCAAACAATTGATGATGAAACAATACTTATCGTTTCT  
 TCACCACATGGCTTTATCCAGGCATCTGATGTTATAGATACTGAATCTGTCTTGCCTTTGACAACACTAA  
 CAGATCCCATACTCCAACATCATCAGGAAGAATCAAATATCATTGGATCATCCTTGGGCAGTCTGTTC  
 AGAAGATTCAAAGGATGTCAAGATTTGGTAACTGTCAT

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG209791 representing NM\_021145  
 Red=Cloning site Green=Tags(s)

MSTVEEDSDTVTVETVNSVTLTQDTEGNLILHCPQNEADEIDSEDSIEPPHKRLCLSSIEDDQSIDDSTPC  
 ISVVALPLSENDQSFVMTATTEVADDEVTEGTVTQIQILQNEQLDEISPLGNEEVSQAWFTTKED  
 KDSL TNKGHKWKQGMWSKEEIDILMNNIERYLKARGIKDATEIIFEMSKDERKDFYRTIAWGLNRPLFAV  
 YRRVLRMYDDRNHVGYKYPTEEIEKLKELRIKHGNDWATIGAALGRSASSVKDRCLMKDTCNTGKWTEEE  
 EKRLAEVVHELSTSTEPGDIVTQGVSWAAVAERVGTRSEKQCRSKWLNLYLNWKQSGGTEWTKEDEINLILR  
 IAELDVADENDINWDLLEAGWSSVRSPQWLRSKWWTIKRQIANHKDVSFPVLIKGLKQLHENQKNNPTLL  
 ENKSGSGVPNSNTNSSVQHVQIRVARLEDNTAISSSPMAALQIPVQITHVSSADSPATVDSETITLNSGT  
 LQTFEILPSFHLQPTGTPGYLLQTSSSQGLPLTLASPTVTLTAAAPASPEQIIVHALSPEHLLNTSDN  
 VTVQCHTPRVIIQTVATEDITSSISQAELTVDSDIQSSDFPEPPDALEADTFPDEVHHPKMTVEPSFNDA  
 HVSKFSDQNSTELMNSVMVRTEEEISDTDLKQEEPSDLASAYVTEGLESPTEIEEQVDQTIDDETILIVP  
 SPHGFIAQSDVIDTESVLP L T T L T D P I L Q H H Q E E S N I I G S S L G S P V S E D S K D V E D L V N C H

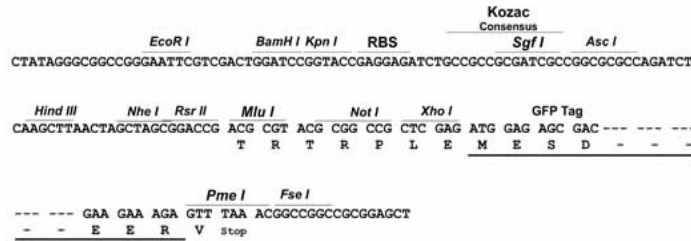
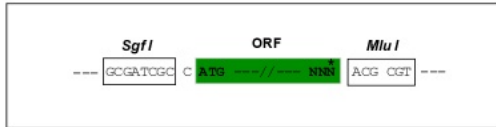
TRTRPLE - GFP Tag - V

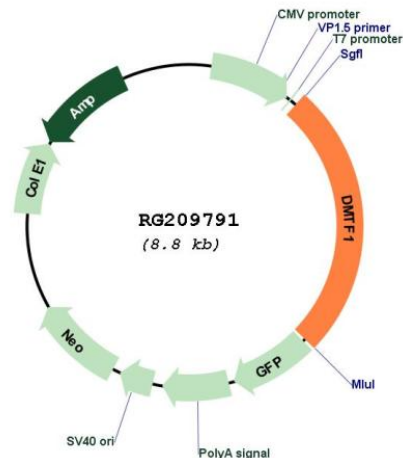
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_021145

**ORF Size:** 2280 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\\_021145.2](#), [NP\\_066968.2](#)

**RefSeq Size:** 3998 bp

**RefSeq ORF:** 2283 bp

**Locus ID:** 9988

UniProt ID: [Q9Y222](#)

Cytogenetics: 7q21.12

Domains: myb\_DNA-binding

Protein Families: Transcription Factors

**Gene Summary:** This gene encodes a transcription factor that contains a cyclin D-binding domain, three central Myb-like repeats, and two flanking acidic transactivation domains at the N- and C-termini. The encoded protein is induced by the oncogenic Ras signaling pathway and functions as a tumor suppressor by activating the transcription of ARF and thus the ARF-p53 pathway to arrest cell growth or induce apoptosis. It also activates the transcription of aminopeptidase N and may play a role in hematopoietic cell differentiation. The transcriptional activity of this protein is regulated by binding of D-cyclins. This gene is hemizygotously deleted in approximately 40% of human non-small-cell lung cancer and is a potential prognostic and gene-therapy target for non-small-cell lung cancer. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2008]