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Product datasheet for RC209791

DMTF1 (NM_021145) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DMTF1 (NM_021145) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DMTF1
Synonyms:	DMP1; DMTF; hDMP1; MRUL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC209791 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCACAGTGGAAGAGGATTCTGACACAGTAACAGTAGAAACTGTGAACTCTGTGACTTTGACTCAGG
ACACAGAAGGGAATCTCATTCTTCACTGCCCTCAGAATGAAGCGGATGAAATAGACTCAGAAGATAGTAT
TGAACCTCCACATAAAAGGCTTTGTTTGTCCTCTGAGGATGATCAGAGTATTGATGATTCTACTCCTTGC
ATATCAGTTGTTGCACTTCCACTTTCAGAAAATGATCAGAGCTTTGAAGTGACCATGACTGCAACCACAG
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TGAAATATCTCCCTTGGGTAACGAGGAAGTTTCAGCAGTTAGCCAAGCATGGTTTACAACTAAAGAAGAT
AAGGATTCTCTGACTAATAAAGGACATAAATGGAAGCAGGGGATGTGGTCCAAGGAAGAAATTGATATTT
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TATAGAAGAGTGCTTCGCATGTATGATGACAGAAACCATGTGGGAAAATATACACCTGAAGAAATTGAGA
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ATCTTCTGTCAAAGATCGGTGCCGACTGATGAAGGATACTTGCAACACAGGGAAGTGGACAGAAGAAGAA
GAAAAGAGACTTGCAGAAGTGGTTCATGAGTTGACAAGCACTGAGCCAGGTGACATAGTCACACAGGGTG
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TTCGTTCCCTGTCTTAATAAAAGGTCTTAAACAGTTACATGAGAACCAAAAAAACAACCCAACGCTTTTG
GAGAATAAATCAGGATCTGGAGTTCCAAACAGTAATACCAATTCCAGTGTGCAGCATGTTCAGATAAGAG
TTGCCCGCTTGGAAGATAATACAGCCATCTCTTCTAGCCCCATGGCAGCATTGCAGATTCCAGTCCAGAT
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AAACAAGCTCAAGCCAAGGCCTTCCCCTAACTCTGACTGCTAGTCCCACAGTAACCCTGACAGCTGCTGC
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GTTACAGTGCAGTGTCACACACCAAGAGTCATCATTCAGACTGTTGCCACAGAGGACATCACTTCTTCCA
TATCCCAAGCAGAACTGACAGTCGATAGTGATATTCAGTCATCTGATTTTCCTGAGCCTCCAGACGCCCT
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CATGTATCCAAATTCAGTGACCAAAATAGCACAGAACTGATGAATAGTGTTATGGTCAGAACAGAAGAAG
AAATCTCTGACACCGACCTTAAACAAGAGGAATCACCCTCTGATTTAGCCAGTGCTTATGTTACTGAGGG
TTTAGAGTCTCCCACTATAGAAGAACAAGTTGATCAAACAATTGATGATGAAACAATACTTATCGTTCCT
TCACCACATGGCTTTATCCAGGCATCTGATGTTATAGATACTGAATCTGTCTTGCCTTTGACAACACTAA
CAGATCCCATACTCCAACATCATCAGGAAGAATCAAATATCATTGGATCATCCTTGGGCAGTCCTGTTTC
AGAAGATTCAAAGGATGTCGAAGATTTGGTAAACTGTCAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

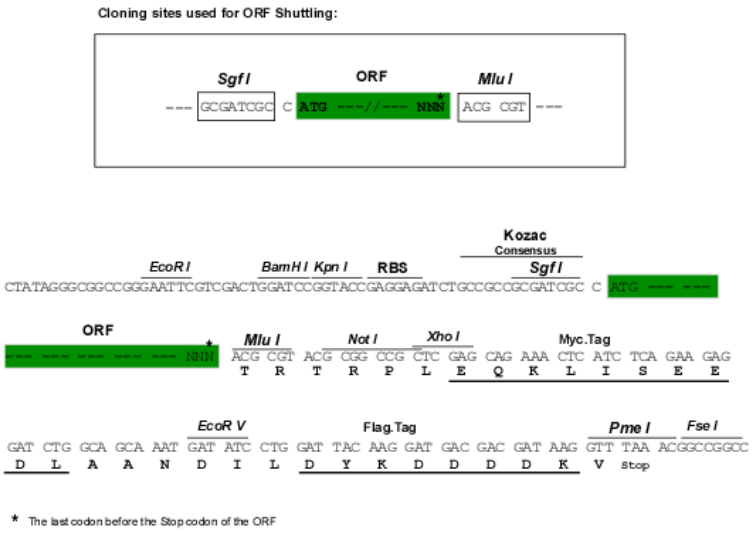
>RC209791 protein sequence
Red=Cloning site Green=Tags(s)

MSTVEEDSDTVTVETVNSVTLTQDTEGNLILHCPQNEADEIDSEDSIEPPHKRLCLSSEDDQSIDDSTPC
ISVVALPLSENDQSFEVTMTATTEVADDEVTEGTVTQIQILQNEQLDEISPLGNEEVSAVSQAWFTTKED
KDSLTNKGHKWKQGMWSKEEIDILMNNIERYLKARGIKDATEIIFEMSKDERKDFYRTIAWGLNRPLFAV
YRRVLRMYDDRNHVGKYTPEEIEKLKELRIKHGNDWATIGAALGRSASSVKDRCRLMKDTCNTGKWTEEE
EKRLAEVVHELTSTEPGDIVTQGVSWAAVAERVGTRSEKQCRSKWLNYLNWKQSGGTEWTKEDEINLILR
IAELDVADENDINWDLLAEGWSSVRSPQWLRSKWWTIKRQIANHKDVSFPVLIKGLKQLHENQKNNPTLL
ENKSGSGVPNSNTNSSVQHVQIRVARLEDNTAISSSPMAALQIPVQITHVSSADSPATVDSETITLNSGT
LQTFEILPSFHLQPTGTPGTYLLQTSSSQGLPLTLTASPTVTLTAAAPASPEQIIVHALSPEHLLNTSDN
VTVQCHTPRVIIQTVATEDITSSISQAELTVDSDIQSSDFPEPPDALEADTFPDEVHHPKMTVEPSFNDA
HVSKFSDQNSTELMNSVMVRTEEEISDTDLKQEESPSDLASAYVTEGLESPTIEEQVDQTIDDETILIVP
SPHGFIQASDVIDTESVLPLTTLTDPILQHHQEESNIIGSSLGSPVSEDSKDVEDLVNCH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021145

ORF Size: 2280 bp

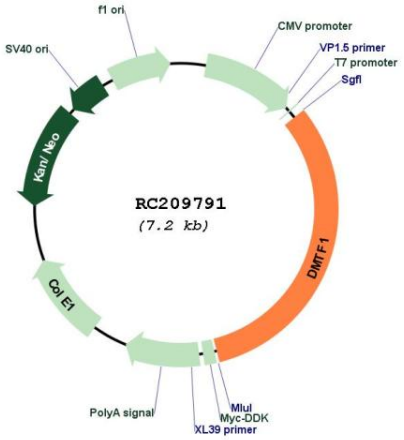
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

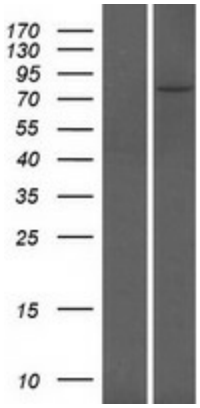
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	4052 bp
RefSeq ORF:	2283 bp
Locus ID:	9988
UniProt ID:	Q9Y222
Cytogenetics:	7q21.12
Domains:	myb_DNA-binding
Protein Families:	Transcription Factors
MW:	84.5 kDa
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 hemizygously 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]

Product images:



Circular map for RC209791



Western blot validation of overexpression lysate (Cat# [LY412065]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209791 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).