

## Product datasheet for **RG226438**

### TET2 (NM\_001127208) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TET2 (NM_001127208) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TET2
Synonyms:	IMD75; KIAA1546; MDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226438 representing NM_001127208 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAACAGGATAGAACCAACCATGTTGAGGGCAACAGACTAAGTCCATTCCTGATACCATCACCTCCCA  
TTTGCCAGACAGAACCTCTGGCTACAAAGCTCCAGAATGGAAGCCCACTGCCTGAGAGAGCTCATCCAGA  
AGTAAATGGAGACACCAAGTGGCACTCTTTCAAAGTTATTATGGAATACCCTGTATGAAGGGAAGCCAG  
AATAGTCGTGTGAGTCTGACTTACACAAGAAAGTAGAGGGTATTCCAAGTGTTCGAAAATGGAGGAA  
TAAAACGCACAGTTAGTGAACCTTCTCTCTGGGCTCCTTCAGATCAAGAAATTGAAACAAGACAAAA  
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GTCTCCGATTTGAGTGATAAGAAAGAATCTGTGAGTTCTGTAGCCCAAGAAAATGCGATTAAGATTTC  
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CAGACTGCAGGGACAATGACTGTTCCATTGTGTTCTGAGAAAACAAGACCAATGTGAGAACACCTCAAGC  
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 TAACTACATCTCCATATGCCTTCACTCGGGTACAGGGCCTTACAACAGATATATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG226438 representing NM\_001127208  
 Red=Cloning site Green=Tags(s)

MEQDRTNHVEGNRLSPFLIPSPPICQTEPLATKLQNGSPLPERAHPEVNGDTKWHFSKSYGIPCMKGSQ  
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 IKVEPGCKPHACMHTAPPENKTWKVTKQENPPASCDNVQKQSI IETMEQHLKQFHAKSLFDHKAL TLKS  
 QKQVKVEMSGPVTVL TRQTTAAELDSHTPALEQQTT SSEKTPTKRTAASVLNFI ESPSKLLDTPIKNLL  
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 QGCP IAKWVRRSSSEEKLLCLVRERAGHTCEAAVIVIL ILVWEGIPLSLADKLYSEL TETLRKYGTL TN  
 RRCALNEERTCACQGLDPETCGASF SFGCSWSMYNGCKFARSKIPRKFLLGDDPKKEEKLESHLQNL S  
 TLMAPTYKKLAPDAYNNQIEYEHRAPECRLGLKEGRPFSGVTA CLDFCAHAHRDLHNMQNGSTLVCTLTR  
 EDNREFGGKPEDEQLHVLPL YKVSVDVDFGSVEAQEEKKRSGAIQVLS SFRKVRMLAEPVKTRQRKLE  
 AKKAAA EKLSSLENSNKEKEKSAPSRTKQ TENASQAKQLAELLRLSGPVMQSSQPPQLKQPQPQQ  
 QQRPPQQPHHPQTESVNSYSASGSTNPMRPNPVSYPNSSHTSDIYGSTSPMNFYSTSSQAAGSYLN  
 SSNPMNYPGLLNQNTQYPSYQCNGNL SVDNCSPLYGSYSPQSQPMDL YRYPQDPLSKLSLPIHTLYQ  
 PRFGNSQSFTSKYLGYGNQNMQGDGFS SCTIRPNVHHVGKLPYPPTHEMDGHFMGATSRLPPNL SNPNMD  
 YKNGEHHSPSHI IHNYSAAPGMFNSSLHALHLQNKENDML SHTANGLSKMLPALNHDRTACVQGLHLKS  
 DANGQEKQPLALVQGVASGAEDNDEVWSDSEQSF LDPDIGGVAVAPTHGSILIECAKRELHATTP LKNPN  
 RNHPTRISLVFYQHKS MNPKHGLALWEAKMAEKAREKEE ECEKYGPDYVPQKSHGKVKVREPAEPHETS  
 EPTYLRFIKSLAERTMSVTTDSTVTTSPYAFTRVTGPYNYI

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001127208

ORF Size: 6006 bp

OTI Disclaimer: 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_001127208.3](#)

**RefSeq Size:** 9677 bp

**RefSeq ORF:** 6009 bp

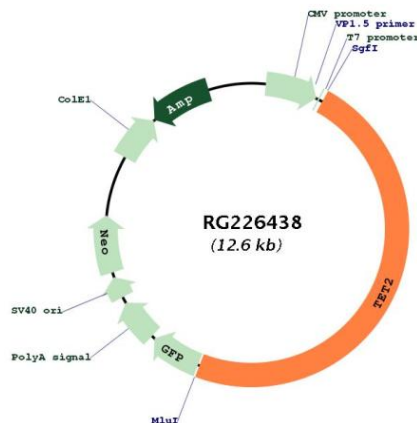
**Locus ID:** 54790

**UniProt ID:** [Q6N021](#)

**Cytogenetics:** 4q24

**Gene Summary:** The protein encoded by this gene is a methylcytosine dioxygenase that catalyzes the conversion of methylcytosine to 5-hydroxymethylcytosine. The encoded protein is involved in myelopoiesis, and defects in this gene have been associated with several myeloproliferative disorders. Two variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011]

## Product images:



Circular map for RG226438