

## Product datasheet for **RG204861**

### MTF1 (NM\_005955) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MTF1 (NM_005955) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MTF1
Synonyms:	MTF-1; ZRF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG204861 representing NM\_005955  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGGGGAACACAGTCCAGACAACAACATCATCTACTTTGAGGCAGAGGAAGATGAGCTGACCCCGATG  
 ATAAAATGCTCAGGTTTGTGGATAAAAACGGACTGGTGCCTTCCTCATCTGGAACGTTTATGATAGGAC  
 CACTGTTCTTATTGAGCAGGACCCTGGCACTTTGGAGGATGAAGATGACGACGGACAGTGC GGAGAACAC  
 TTGCCTTTTCTAGTAGGGGTGAAGAGGGCTTTACCTGATAGATCATGAAGCAATGTCCAGGGTTATG  
 TGCAGCACATTATCTCACCAGATCAGATTCATTTGACAATAAACCTGGTTCCACACCCATGCCAAGAAA  
 TATTGAAGGTGCAACCCTCACTCTGCAGTCGGAATGTCCGAAACAAAACGTAAGAAAGTAAAGCGGTAC  
 CAATGTACCTTTGAGGGCTGTCCCGCACCTACAGCACAGCAGGCAACCTGCGAACCCACCAGAAGACTC  
 ACCGAGGAGAGTACACCTTTGTCTGTAATCAGGAGGGCTGTGGCAAAGCCTTCTTACCTCTTACAGCCT  
 CAGGATCCACGTGCGAGTGCACAGGAAGAGAAGCCATTTGAGTGTGACGTGCAGGGCTGTGAGAAGGCA  
 TTCAACACACTGTACAGGCTGAAAGCACATCAGAGGCTTACACAGGGAAAACGTTTAACTGTGAATCTG  
 AAGGCTGCAGCAATACTTCACCACACTCAGTGATCTGAGGAAGCACATTCGAACTCATACAGGGAAAA  
 GCCATTTCCGGTGCATCACGATGGCTGTGGAAAAGCATTTCAGCAAGCCACCACCTTAAAACTCACGTT  
 CGTACACATACTGGTGAAGACCCTTCTTCTGCCCCAGTAATGGCTGTGAGAAAACATTCAGCACTCAAT  
 ACAGTCTCAAAGTCACATGAAAGGTGATGATAACAAAGGACACTCATAAATGCACTTCCACAACACAA  
 TGGATCAGAGGATACAAATCACTCACTTTGTCTAAGTGACTTGAGCCTTCTGTCCACAGATTCTGAATTG  
 CGAGAAAATTCAGTACGACCCAGGGCCAGGACCTCAGCACAATTCACCAGCAATCATCTTTGAATCAA  
 TGTTCCAGAATTCAGATGATACGCAATTCAGGAAGATCCTCAACAGACGGCTTCTTGACTGAAAGTTT  
 TAATGGTGATGCAGAGTCAGTCAGTGATGTTCCGCCATCCACAGGAAATTCAGCATCTTTATCTCTCCA  
 CTTGTAAGTCAACCTGGCCTCTCCGAGCCACCCAGCCTCTACTACCTGCCTCAGCTCCGCTGCTCCTC  
 CGCCTGCTCCCTCCCTAGGACCTGGCTCCAGCAAGCTGCATTTGGCAACCCCTGCTCTTTACAACC  
 TCCAGAAGTGCCTGTTCCCCACAGCACACAGTTTGTGCTAATCATCAAGAGTTTCTCCGACCCCCAG  
 GCACCGCAGCCATTGTACCAGGACTTTCTGTTGTTGCTGGGGCTTCTGCATCAGCAGCGGCAGTGGCAT  
 CAGCTGTGGCAGCACCAGCCCAACAAAGTACTACTGAGCCCTGCCAGCCATGGTCCAGACTCTGCC  
 CCTGGGTGCCAACTCTGTCCCTAACTAATAATCCACAATAACCATCACCCCAACTCCCAACACAGCTATC  
 CTGCAGTCCAGCCTAGTCATGGGAGAACAGAATTACAATGGATATTAATGGTGCCACCAAGTTCTCCAC  
 AAAACCAAGAACAATTCAGCAAGCATCTAAAGTTGAGAAGGTGTTTTTACCCTGCAGTACCAGTAGC  
 CAGTAGCCAGGGAGCTCTGTCCAGCAGATTGGCCTCAGTGTTCTGTGATCATCATCAAACAAGAAGAG  
 GCATGTGAGTGTGAGTGTGATGCCGGGACTCTGCAAAGGAGCGGGCATCCAGCAGGAGAAAGGGGTGCT  
 CCTCCCCACCCCTCCAGAGCCGAGCCCCAGGCTCCTGATGGGCCAGCCTGCAGCTCCAGCGCAGAC  
 TTTCTCTCAGCCCTGTTCCCGGGTATCATCTCTACCTTGCCTCCTCTGTGAGCAAAGCCGACAA  
 GCAGAGACTCCTCAGACCCTCAGACAGAAACATTAAGTGCCATGGATGTGTCAGAGTTTCTATCCCTCC  
 AGAGCCTGGACACCCCGTCCAATCTGATTCCCATTGAAGCACTACTGCAGGGGGAGGAGATGGGCCT  
 CACCAGCAGCTTCTCCAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

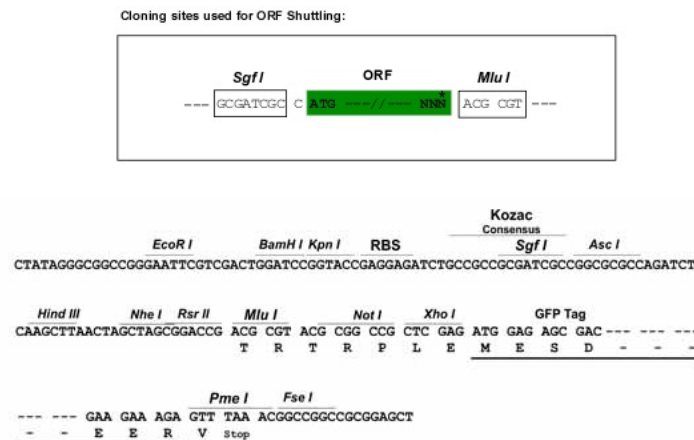
**Protein Sequence:** >RG204861 representing NM\_005955  
Red=Cloning site Green=Tags(s)

```
MGEHSPDNNIYFEAEDELTPDDKMLRFVDKNGLVPSSSGTVYDRRTTVLIEQDPGTLEDEDDDGQCGEHL
LPFLVGGEEGFHLIDHEAMSQGYVQHIIISPDQIHLTINPGSTPMPRNIEGATLTLQSECPETKRKEVKRY
QCTFEGCPRTYSTAGNLRTHQKTHRGEYTFVCNQEGCGKAFLTSYSLRIHVRVHTKEKPFECQVQCEKA
FNTLYRLKAHQRLHTGKTFNCESEGCSKYFTTLDLRLKHIRHTGKPFRCDDHDGCGKAF AASHHLKTHV
RTHTGERPF FCP SNGCEKTFSTQYSLKSHMKGHDKGHSYNALPQHNGSEDTNHSLCLSDL SLLSTDSEL
RENSSTTQGD LSTISPAIIFESMFQNSDDTAIQEDPQQTASL TEFNGDAESVSDVPPSTGNSASLSLP
LVLQPGLSEPPQPLL PASAPSAPPAPSLGPGSQAAFGNPPALLQPPEVPVPHSTQFAANHQEFLPHPQ
APQPIVPLSVVAGASASAAVASAVAAPAPPQSTTEPLPAMVQTLPLGANSVL TNNPTITITPTPNTAI
LQSSLVMGEQNLQWILNGATSSPQNQEIQQASKVEKVFVFTAVPVASSPGSSVQVIGLSVPVIIKQEE
ACQCQCACRDSAKERASSRRKGCSSPPPPEPSPQAPDGP SLQLPAQTFSSAPVPGSSSSTLPSSCEQSRQ
AETPSDPQTETLSAMDVSEFLSLQSLDTPSNLIP IEALLQGEEMGLTSSFSK
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005955

**ORF Size:** 2259 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\\_005955.2](#), [NP\\_005946.2](#)

**RefSeq Size:** 7986 bp

**RefSeq ORF:** 2262 bp

**Locus ID:** 4520

**UniProt ID:** [Q14872](#)

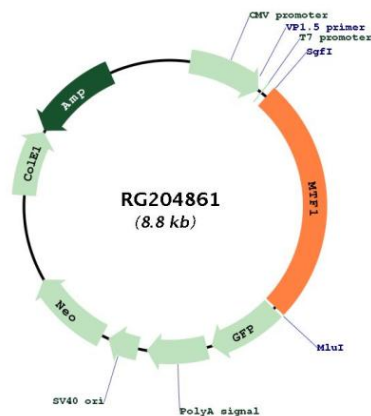
**Cytogenetics:** 1p34.3

**Domains:** zf-C2H2

**Protein Families:** Transcription Factors

**Gene Summary:** This gene encodes a transcription factor that induces expression of metallothioneins and other genes involved in metal homeostasis in response to heavy metals such as cadmium, zinc, copper, and silver. The protein is a nucleocytoplasmic shuttling protein that accumulates in the nucleus upon heavy metal exposure and binds to promoters containing a metal-responsive element (MRE). [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG204861