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Product datasheet for SC115558

MTF2 (NM_007358) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTF2 (NM_007358) Human Untagged Clone
Tag:	Tag Free
Symbol:	MTF2
Synonyms:	dJ976O13.2; M96; PCL2; TDRD19A
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC115558 sequence for NM_007358 edited (data generated by NextGen Sequencing)

ATGAGAGACTCTACAGGGGCAGGTAATTCACTGGTCCACAAGCGGTCTCCTTTACGTCGA
AACCAAAAGACCCCAACATCCTTGACCAAGCTGTCTTTACAGGATGGACATAAAGCCAAA
AAGCCAGCATGTAAATTTGAAGAGGGTCAGGATGTCCTAGCTAGATGGTCAGATGGCTTG
TTTTATCTTGGCACTATCAAAAAGATAAACATATTGAAACAGAGCTGCTTCATCATATTT
GAAGACAGTTCTAAATCCTGGGTTCTCTGGAAGGACATTCAAACAGGAGCCACTGGAAGT
GGGGAAATGGTCTGTACAATATGTCAAGAAGAGTATTCAGAAGCTCCCAATGAAATGGTT
ATATGTGACAAGTGTGGCCAAGGATATCATCAGTTGTGTCACACACCTCATATTGATTCC
AGTGTGATTGATTCAGATGAAAAATGGCTCTGTCGGCAGTGTGTTTTTGCAACAACAACA
AAGAGGGGTGGTGCACTTAAGAAAGGACCAAATGCCAAAGCATTGCAAGTCATGAAGCAG
ACATTACCCTATAGTGTGGCAGACCTTGAATGGGATGCAGGTCATAAAACCAATGTCCAG
CAGTGTTACTGCTATTGTGGAGGCCCTGGAGACTGGTATTTGAAGATGCTACAGTGCTGC
AAATGTAAGCAGTGGTTTCATGAGGCTTGTGTGCAATGCCTTCAAAAGCCAATGCTATTT
GGAGACAGATTTTATACGTTTATATGCTCTGTCTGCAGTTCTGGACCAGAATACCTCAAA
CGTCTACCATTACAGTGGGTAGATATAGCACACCTATGCCTTTACAACCTAAGTGTTATT
CATAAGAAGAAATACTTTGATTCTGAACTTGAGCTTATGACATACATTAATGAAAACTGG
GATAGATTGCACCCTGGAGAGCTGGCAGACACACCAAAATCTGAAAGATATGAGCATGTT
CTGGAGGCATTAAATGATTACAAGACCATGTTTATGTCTGGGAAAGAAATAAAGAAGAAG
AAGCATTTGTTTGGGTTGCGAATTCGTGTTCCTCCTGTGCCACCAAATGTGGCTTTCAAA
GCAGAGAAAGAACCTGAAGGAACATCTCATGAATTTAAAATTAAAGGCAGAAAGGCATCC
AAACCTATATCTGATTCAAGGGAAGTAAGCAATGGCATAGAAAAAAAAGGAAAGAAAAAA
TCTGTAGGTCGTCCACCTGGCCCATATACAAGAAAAATGATTCAAAAAACTGCTGAGCCA
CTTTTGGATAAGGAATCAATTTCAGAGAATCCTACTTTGGATTTACCTTGTTCTATAGGG
AGAACTGAGGGAACTGCACATTCATCCAATACCTCAGATGTGGATTTCACGGGTGCTTCC
AGTGCAAAAGAAACTACCTCGTCTAGCATTTCCAGGCATTATGGATTATCTGACTCCAGA
AAAAGAACGCGTACAGGAAGATCTTGGCCTGCTGCAATACCACATTTGCGGAGAAGAAGA
GGTCGTCTTCCAAGAAGAGCACTCCAGACTCAGAACTCAGAAATTGTAAAAGATGATGAA
GGCAAAGAAGATTATCAGTTTGATGAACTCAACACAGAGATTCTGAATAACTTAGCAGAT
CAGGAGTTACAACTCAATCATCTAAAGAACTCCATTACCAGTTATTTTGGTGCTGCAGGT
AGAATAGCATGTGGCGAAAAATACCGAGTTTTGGCACGTCGGGTGACACTTGATGGAAAG
GTGCAGTATCTTGTGGAATGGGAAGGAGCAACTGCATCCTGA

Clone variation with respect to NM_007358.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_007358 unedited

TAAATTTGATACACTATTAGGCGCCGGATTCGCCGAGCGGCAGTCCGCGGGAAACCAAAG
GCGAGGGGCTGTATTGAAGTGGGCTGTGTTTGAGGCCGGTGTAAGAACGCTCATTCTACC
CCCAACCCTTGTCTCCAAGGACCTCGGTTTGTGCGTGCATATGTGCCGGGTACCCGGTGG
GGCGGGTGCCCAGTAAGTGCTCGGACTCGCAGGGGAAGCGCCCACGGGGACGGATTGGTT
GTTTTTTCCTGTATGAAGCGGTTGGCACCACTGAAGTGACCGAATGAGAGACTCTACAGG
GGCAGGTAATTCACTGGTCCACAAGCGGTCTCCTTTACGTCGAAACCAAAAGACCCCAAC
ATCCTTGACCAAGCTGTCTTTACAGGATGGACATAAAGCCAAAAAGCCAGCATGTAAATT
TGAAGAGGGTCAGGATGTCCTAGCTAGATGGTCAGATGGCTTGTTTTATCTTGGCACTAT
CAAAAAGATAAACATATTGAAACAGAGCTGCTTCATCATATTTGAAGACAGTTCTAAATC
CTGGGTTCTCTGGAAGGACATTCAAACAGGAGCCACTGGAAGTGGGGAAATGGTCTGTAC
AATATGTCAAGAAGAGTATTCAGAAGCTCCCAATGAAATGGTTATATGTGACAAGTGTGG
CCAAGGATATCATCAGTTGTGTCACACACCTCATATTGATTCCAGTGTGATTGATTCAGA
TGAAAAATGGCTCTGTCGGCAGTGTGTTTTTGCAACACAACAAGAGGGGTGGTGCACTTA
AGAAAGACCAATGCCAAGCATTGCAGTCATGAAGCAGACTTACCCTATAGTGTGGCAGAC
CTTGAATGGGGATGCAGTCATAANACCATGTNCAGCAGTGTACTGCTATTGTGGAGGCCT
GGAGACTGGTATTTGAA

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_007358 unedited
ACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTACAGGCTCAATATATTT
TTTTACACTTTGCTTGAAAAAAAATTCAATATTTTACAGTCTTTCAGTAGGCATTATATA
CACTGCACTTTATGAAATCTAAAAGGTATTGAAATAAATTTTTCCAACATTTTGGTAACA
AAACAAACAACGTTTCTCCAAATACTTGTGCTATCTACATGATGTTTGCTCTGATAATCA
CTAATCACAAAAAACTGACTCAATGGAATAATTAGAAAAATTGTCTAACACCATGCATGG
GTTTCAATCATTTTTAATATCCTATCCTAGAAACATTCTACAAATCTTAAGATTTAAAAA
ATTAAGTCTCTGTTCTGATTTTTAAAAGATACCTTTTTATGACAATATCCATAACATTGA
CAGGTACATGTTAAGGCTAGTATCATCCCCTTTTTTGAATTTTTTTGACTTTTTTTTTTT
TTTTAAGAAAGATAGTAAAAGCCAGACTCCTTTAGGGCTTTGAACTGTACCTACAGAAAA
TCAGAGTGCAGTGAACATAATGTTCAGTCCTACAGTCAGGATGCAGTTGCTCCTTCCCAT
TCCACAAGATACTGCACCTTTCCATCAAGTGTCACCCGACGTGCCAAAACTCGGTATTTT
TCGCCACATGCTATTCTACCTGCAGCACCAAAATAACTGGTAATGGAGTTCTTTAGATGA
TTGAGTTGTAACTCCTGATCTGCTAAGNTATTCAGAATCTCTGTGTTGAGTTCATCAAAC
TGATAAATCTCCTTGCCTTCATCATCTTTTACAATTTCTGAGTNCTGAGTCTGGAGTGCT
CTTCTTGGAAGAGAACTCCTCTTTCTCGCAATGTGGTATTGCAGCAGGCCAAGATCTCCT
GTACGCGTTCTTTTCTTGAACAGATATCCATAATGCTG
```

Restriction Sites: NotI-NotI

ACCN: NM_007358

Insert Size: 2620 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_007358.1, NP_031384.1

RefSeq Size: 2648 bp

RefSeq ORF: 1782 bp

Locus ID: 22823

UniProt ID: Q9Y483

Cytogenetics: 1p22.1

Domains: PHD, TUDOR

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: Polycomb group (PcG) that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex. Acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting the PRC2 complex, leading to enhance PRC2 H3K27me3 methylation activity. Regulates the transcriptional networks during embryonic stem cell self-renewal and differentiation. Promotes recruitment of the PRC2 complex to the inactive X chromosome in differentiating XX ES cells and PRC2 recruitment to target genes in undifferentiated ES cells. Required to repress Hox genes by enhancing H3K27me3 methylation of the PRC2 complex. In some conditions may act as an inhibitor of PRC2 activity: able to activate the CDKN2A gene and promote cellular senescence by suppressing the catalytic activity of the PRC2 complex locally. Binds to the metal-regulating-element (MRE) of MT1A gene promoter (By similarity). [UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.