

Product datasheet for RC228407L3

OriGene Technologies, Inc.

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MTF2 (NM_001164393) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MTF2 (NM_001164393) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: MTF2

Synonyms: dJ976O13.2; M96; PCL2; TDRD19A

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone

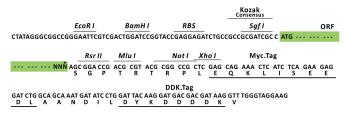
Sequence:

The ORF insert of this clone is exactly the same as(RC228407).

Restriction Sites: Sgfl-Rsrll

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001164393

ORF Size: 1473 bp





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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: <u>NM 001164393.1</u>, <u>NP 001157865.1</u>

 RefSeq Size:
 3863 bp

 RefSeq ORF:
 1476 bp

 Locus ID:
 22823

 UniProt ID:
 Q9Y483

 Cytogenetics:
 1p22.1

Protein Families: Druggable Genome, Transcription Factors

MW: 55.7 kDa

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]