Product datasheet for RC228946L4

MTF2 (NM_001164392) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTF2 (NM_001164392) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	MTF2
Synonyms:	dJ976O13.2; M96; PCL2; TDRD19A
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC228946).
Restriction Sites:	SgfI-RsrII
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

Sgf I   ORF   *Rsr II*

--- GCG ATC GC C ATG --- // --- NNN* AG C GGA CCG ---

EcoR I   *BamH I*   RBS   Kozak Consensus *Sgf I*   ORF

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C ATG --- --- ---

Rsr II   *Mlu I*   *Not I*   *Xho I*   mGFP Tag

--- --- --- NNN* AGC GGA CCG ACG CGT ACG CGG CCG CTC GAG ATG AGC GGG GGC --- --- --- ---
            S   G   P   T   R   T   R   P   L   E   M   S   G   G   -   -   -   -

--- --- GGA CTC AGA GTT TGG GTA GGA AGC
  -   -   G   L   R   V

* The last codon before the Stop codon of the ORF.

ACCN:	NM_001164392
ORF Size:	1608 bp

View online »

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_001164392.1, NP_001157864.1
RefSeq ORF:	1611 bp
Locus ID:	22823
UniProt ID:	Q9Y483
Cytogenetics:	1p22.1
Protein Families:	Druggable Genome, Transcription Factors
MW:	60.5 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]

Product images:
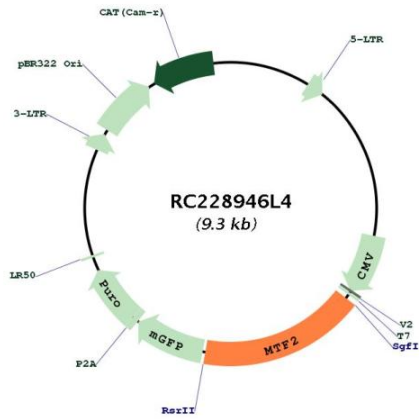
Circular map for RC228946L4