

Product datasheet for MR203782

Tmem119 (NM_146162) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tmem119 (NM_146162) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tmem119
Synonyms:	AW208946; BC025600; obif
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203782 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGTCCCCTGGTTCCTCCTGTCTCTGCTGCTACTTGGCAGGCCTGTGCCTGGGGTGGCCTACTCTGTGT
CACTCCCGGCCTCCTTCTGGAGGATGTAGCCGGCAGCGGGGAAGCTGAGGGTTCCTCAGCCTCTCCCC
GAGCCTGCCGCCGCTGGGACTCCAGCCTTCAGTCCCACACCGGAGAGACCCAGCCACAGCTCTGGAC
GGCCCCGTGCCACCCACCAACCTCCTGGAAGGGATCATGGATTTCTCCGGCAGTACGTGATGCTCATCG
CGGTGGTGGGCTCGTGACCTTCTCATCATGTTTCATAGTCTGCGCCGCCCTCATCACGCCCAGAAGCA
CAAGGCCACAGCCTACTACCCATCCTCGTTCCTGAAAAGAAGTATGTGGACCAGAGAGACCGGGCTGGG
GGACCCCGTACCTTCAGCGAGGTCCCTGACAGGGCACCTGACAGCCGGCATGAAGAAGGCCTGGACACCT
CCCATCAGCTCCAGGCTGACATTCTGGTCTGCTACCCAGAACCTCCGGTCTCCAGCTAGAGCCCTGCCAGG
CAATGGGGAGGGAGCAAAGCCTGTGAAGGGTGGGTCGGAGGAGGAGGAGGAAGAGGTGCTCAGCGGTGAG
GAGGAGGCCAGGAAGCCCCAGTATGTGGGTCCTGAAGAGAAGCTGGGGTCCCAGAGGAGTCCGGTCT
CAGCAGAGGTGAAGGGTTCCTGCCACCAGTGAAGGCAAGGGGAAGCAGAAGGTCTTTCTCCTTAGC
CCAGGAATCCCAGGGAGCAACTGGTCTCCTGAAAGTCCCTGTGCCTGCAACAGAGTCTCCCCAGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR203782 protein sequence
 Red=Cloning site Green=Tags(s)

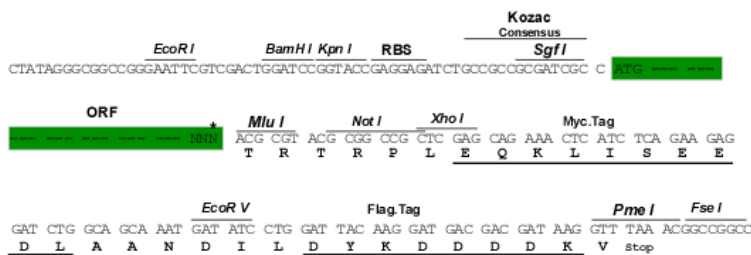
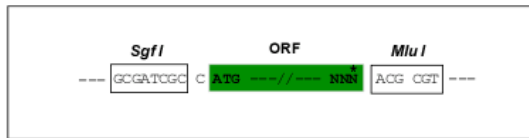
MVPWFLLSLLLLARPVPGVAVSVSLPASFLEDVAGSGEAEAGSSASSPSLPPPGTAFSPPTPERPQPTALD
 GPVPPTNLLLEGIMDFFRQYVMLIAVVGSLTFLIMFIVCAALITRQKHKATAYYPSSFPEKKYVDQRDRAG
 GPRTFSEVPDRAPDSRHEEGLDTSHLQADILAATQNLRSAPALPGNGEGAKPVKGGSEEEEEVLSGQ
 EEAQEAAPVCGVTEEKLGVPEESVSAEAEVGPATSEGQGEAEGSFSLAQESQGATGPPEPCACNRVSPSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_146162

ORF Size: 843 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_146162.3](#)

RefSeq Size: 2132 bp

RefSeq ORF: 843 bp

Locus ID: 231633

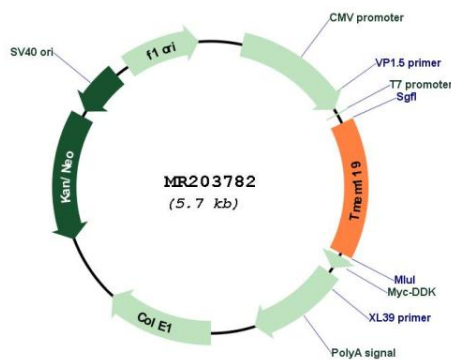
UniProt ID: [Q8R138](#)

Cytogenetics: 5 F

MW: 29.4 kDa

Gene Summary: Plays an important role in bone formation and normal bone mineralization (PubMed:26207632, PubMed:22416756, PubMed:20025746). Promotes the differentiation of myoblasts into osteoblasts (PubMed:22416756, PubMed:20025746, PubMed:22579779). May induce the commitment and differentiation of myoblasts into osteoblasts through an enhancement of BMP2 production and interaction with the BMP-RUNX2 pathway (PubMed:21239498, PubMed:22579779). Upregulates the expression of ATF4 which plays a central role in osteoblast differentiation (PubMed:24362451). Essential for normal spermatogenesis and late testicular differentiation (PubMed:26207632).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR203782