

Product datasheet for **RG224098**

TMEM119 (NM_181724) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	TMEM119
Synonyms:	OBIF
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG224098 representing NM_181724
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGTTTCGGCGGCAGCCCCAGCCTCCTCATCCTTCTGTTGCTGCTCCTGGGGTCTGTGCCTGCTACCG
ACGCCCGCTCTGTGCCCTGAAGGCCACGTTCTGGAGGATGTGGCGGGTAGTGGGAAGCCGAGGGCTC
GTCGGCCTCCTCCCGAGCCTCCCGCCACCCTGGACCCGGCCCTCAGCCCCACATCGATGGGGCCCCAG
CCCACAACCTGGGGGGCCATACCCCCACCAACTTCTGGATGGGATAGTGGACTTCTTCCGCCAGT
ACGTGATGCTGATTGCTGTGGTGGGCTCCCTGGCCTTCTGCTGATGTTTCATCGTCTGTGCCGCGGTCAT
CACCCGGCAGAAGCAGAAGGCCTCGGCCTATTACCCATCGTCCTTCCCCAAGAAGAAGTACGTGGACCAG
AGTGACCGGGCCGGGGGCCCCGGGCCTTCAGTGAGGTCCCGACAGAGCCCCGACAGCAGGCCCGAGG
AAGCCTGGATTCTCCCGCAGCTCCAGGCCGACATCTTGCCCGCCACCCAGAACCTCAAGTCCCCAC
CAGGGCTGCACTGGGCGGTGGGGACGAGCCAGGATGGTGGAGGGCAGGGGCGCAGAGGAAGAGGAGAAG
GGCAGCCAGGAGGGGACCAGGAAGTCCAGGGACATGGGGTCCCAGTGGAGACACCAGAGGCGCAGGAGG
AGCCGTGCTCAGGGGTCTTGAGGGGGCTGTGGTGGCCGGTGAAGGGGAGCTGGAAGGGTCTCT
CTTGTTAGCCAGGGTGCCAGGGACAGTGGGTCCCCCGAAAGCCCCGTGCTTGCAGCAGTGTCCAC
CCCAAGTGTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG224098 representing NM_181724
Red=Cloning site Green=Tags(s)

MVSAAAPSLILLILLLLGSVPATDARSVPLKATFLEDVAGSGEAGSSASSPSLPPWTPALSPSTSMGPQ
PTTLGGPSPTNFDGIIVDFRQYVMLIAVVGSLAFLLMFIVCAAVITRQKQKASAYPSSFPKKKYVDQ
SDRAGGPRAFSEVPDRAPDSRPEEALDSSRQLQADILAAATQNLKSPTRAALGGDGARMVEGRGAEEEEK
GSQEGDQEVQGHGVPVETPEAQEEPCSGVLEGAVVAGEGQGELEGSLLLAQGAQGPVGPPEPCACSSVH
PSV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTACTAGTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - E E R V Stop

ACCN: NM_181724

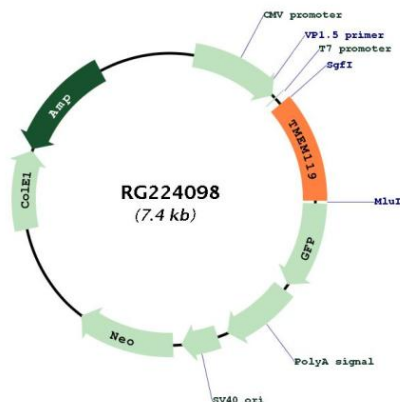
ORF Size: 849 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_181724.1</u> , <u>NP_859075.1</u>
RefSeq Size:	2586 bp
RefSeq ORF:	852 bp
Locus ID:	338773
UniProt ID:	<u>Q4V9L6</u>
Cytogenetics:	12q23.3
Protein Families:	Transmembrane
Gene Summary:	Plays an important role in bone formation and normal bone mineralization. Promotes the differentiation of myoblasts into osteoblasts (PubMed:20025746). May induce the commitment and differentiation of myoblasts into osteoblasts through an enhancement of BMP2 production and interaction with the BMP-RUNX2 pathway. Upregulates the expression of ATF4, a transcription factor which plays a central role in osteoblast differentiation. Essential for normal spermatogenesis and late testicular differentiation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG224098