

Product datasheet for RG223648

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OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

TMEM100 (NM 001099640) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: TMEM100 (NM_001099640) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: TMEM100

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG223648 representing NM_001099640 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACTGAAGAGCCCATCAAGGAGATCCTGGGAGCCCCAAAGGCTCACATGGCAGCGACGATGGAGAAGA GCCCCAAGAGTGAAGTTGTGATCACCACAGTCCCTCTGGTCAGTGAGATTCAGTTGATGGCTGCTACAGG GGGTACCGAGCTCTCCTGCTACCGCTGCATCATCCCCTTTGCTGTGGTTGTCTTCATCGCCGGCATCGTG GTCACCGCGGTGGCTTACAGCTTCAATTCCCATGGGTCATTATCTCCATCTTTTGCCTGGTTGTTCTGT CATCTGGACTTTTTTTTACTAGCCTCCAGTGCCTTGTGCTGGAAAGTGAGACAAAGGAGCAAGAAAGCCAA

GAGACGGGAGAGTCAAACAGCTCTCGTGGCAAATCAGAGAAGCTTGTTTGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223648 representing NM_001099640

Red=Cloning site Green=Tags(s)

MTEEPIKEILGAPKAHMAATMEKSPKSEVVITTVPLVSEIQLMAATGGTELSCYRCIIPFAVVVFIAGIV VTAVAYSFNSHGSIISIFGLVVLSSGLFLLASSALCWKVRQRSKKAKRRESQTALVANQRSLFA

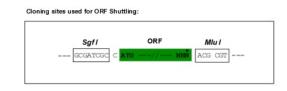
TRTRPLE - GFP Tag - V

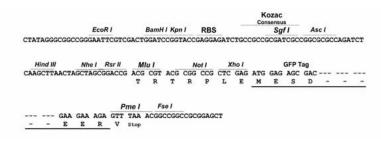
Restriction Sites: Sgfl-Mlul



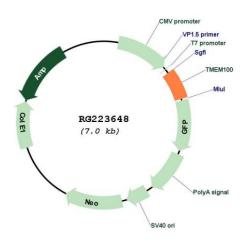


Cloning Scheme:





Plasmid Map:



ACCN: NM_001099640

ORF Size: 402 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



TMEM100 (NM_001099640) Human Tagged ORF Clone - RG223648

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 001099640.2</u>

 RefSeq Size:
 2269 bp

 RefSeq ORF:
 405 bp

 Locus ID:
 55273

 UniProt ID:
 Q9NV29

 Cytogenetics:
 17q22

Protein Families: Transmembrane

Gene Summary: Plays a role during embryonic arterial endothelium differentiation and vascular

morphogenesis through the ACVRL1 receptor-dependent signaling pathway upon stimulation by bone morphogenetic proteins, such as GDF2/BMP9 and BMP10. Involved in the regulation of nociception, acting as a modulator of the interaction between TRPA1 and TRPV1, two molecular sensors and mediators of pain signals in dorsal root ganglia (DRG) neurons. Mechanistically, it weakens their interaction, thereby releasing the inhibition of TRPA1 by TRPV1 and increasing the single-channel open probability of the TRPA1-TRPV1 complex.

[UniProtKB/Swiss-Prot Function]