

## Product datasheet for **RC223648**

### **TMEM100 (NM\_001099640) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM100 (NM_001099640) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TMEM100
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223648 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACTGAAGAGCCCATCAAGGAGATCCTGGGAGCCCCAAAGGCTCACATGGCAGCGACGATGGAGAAGA  
GCCCAAGAGTGAAGTTGTGATCACCACAGTCCCTCTGGTCAGTGAGATTCAGTTGATGGCTGCTACAGG  
GGGTACCGAGCTCTCTGCTACCGCTGCATCATCCCCTTGGCTGTGGTTGTCTTCATCGCCGGCATCGTG  
GTCACCGCGGTGGCTTACAGCTTCAATCCCATGGGTCTATTATCTCCATCTTTGGCCTGGTTGTTCTGT  
CATCTGGACTTTTTTACTAGCCTCCAGTGCCTTGTGCTGGAAAGTGAGACAAAGGAGCAAGAAAGCCAA  
GAGACGGGAGAGTCAAACAGCTCTCGTGGCAAATCAGAGAAGCTTGTGTTGCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC223648 protein sequence Red=Cloning site Green=Tags(s)
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MTEEPIKEILGAPKAHMAATMEKSPKSEVVITVPLVSEIQLMAATGGTELSCYRCIIPFVVVFIAGIV  
VTAVAYSFNSHGSIIISIFGLVVLSSGLFLLASSALCWKVRQSRKAKRRESQTALVANQRSLFA

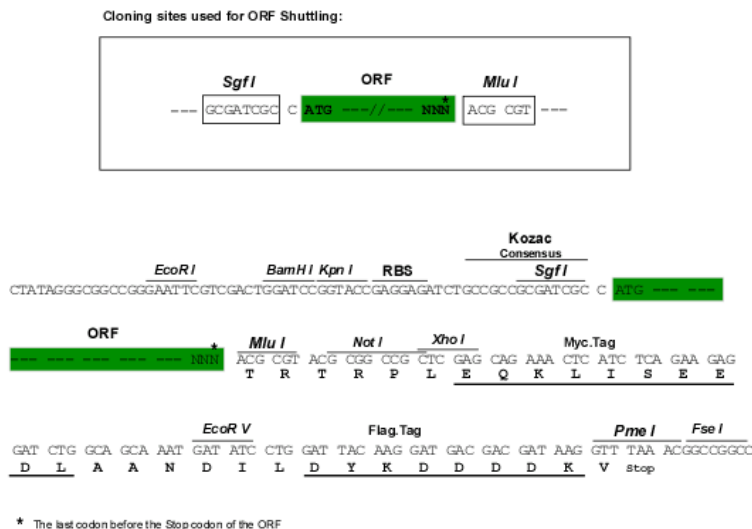
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/mk6058_e05.zip">https://cdn.origene.com/chromatograms/mk6058_e05.zip</a>
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Restriction Sites:	Sgfl-MluI
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**Cloning Scheme:**


**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](#)

**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\\_001099640.2](#)

**RefSeq Size:** 2269 bp

**RefSeq ORF:** 405 bp

**Locus ID:** 55273

UniProt ID: [Q9NV29](#)

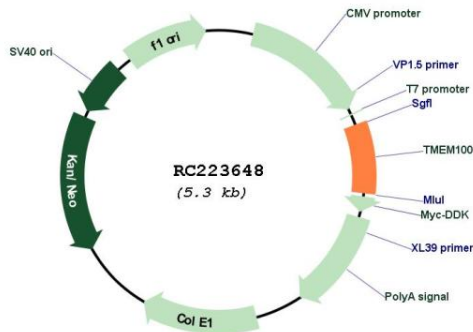
Cytogenetics: 17q22

Protein Families: Transmembrane

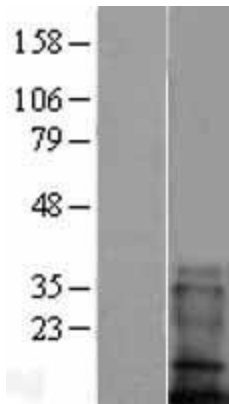
MW: 14.4 kDa

**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]

**Product images:**



Circular map for RC223648



Western blot validation of overexpression lysate (Cat# [LY420469]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223648 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).