

Product datasheet for **RC200953**

TMEM108 (NM_023943) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM108 (NM_023943) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TMEM108
Synonyms:	CT124; RTLN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200953 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGAGAAGTTTACAGGCCCTCTATTGCCAACTGTTAAGTTTCTGCTGATCTTGGCACTGACCGAAG
 CGCTGGCATTGGCCATCCAGGAACCATCTCCAGGGAATCTTTCAGGTCTCCCTTCAGGCACTCCCC
 GGAACCATGGTGACAGCACCCACAGCTCTACCAGACATACTTCTGTGGTGATGCTGACCCCAATCCC
 GATGGACCCCTCACAGGCTGCAGCTCCCATGGCAACACCGACACCCCGTGCAGAGGGGACCCCTCTA
 CGCACACCATCTCCACATCGCTGCGACAGTAACCGCCCCATTCTGAAAGCTCCCTGTCCACAGGGCC
 CGCTCCAGCAGCCATGGCAACCACATCTCCAAGCCAGAGGGCCGCCCTCGAGGGCAGGCTGCCCCACC
 ATCTGCTGACAAAGCCACCGGGGGCCACAGCCGCCACCACAGCGCCCCCGCACTACCACACGCA
 GGCCCCCAGGCCCCAGGCTCTCCCGAAAAGGGGCTGGTAATTCATCACGCCCTGTCCGCTGCACC
 TGGTGGCCACTCCAGGAGTAAAGAAGGACAGCGAGGACGAAATCCAAGCTCCACACCTCTGGGGCAGAAG
 CGGCCCTGGGGAAAATCTTTCAGATCTACAAGGGCAACTTCACAGGGTCTGTGGAACCGGAGCCCTCTA
 CCCTACCCCCAGGACCCCACTCTGGGGTACTCTCTTACCACAGCCCCAGACAGTGGCTGCGACCAC
 AGTGCCAGCAATACCTCATGGGCACCCACCACCCTCCCTGGGGCTGCAAAGGACAAGCCAGGCCTT
 CGCAGAGCAGCCAGGGGGTGGTTCTACCTTACCAGCCAAGGAGGGACACCAGATGCCACAGCAGCCT
 CAGGTGCCCTGTGAGTCCACAAGCTGCCCCAGTGCTTCTCAGCGCCCCACCAGGTGACCCACAGGA
 TGGCCCCAGCCATAGTGACTCTTGGCTTACTGTTACCCCTGGCACCAGCAGACCTCTGTCTACCAGCTCT
 GGGTCTTACGGCTGCCACGGGGCCACCCAGCTGCCTTCGATACCAGTGTCTCAGCCCTTCCAGG
 GGATCTCTCAGGAGCATCCACAACCCACAAGCTCCAACCCCTCCAGGGTCTCAGAAGCACTAT
 TTCTGGAGCCAAGGAGGAGACTGTGGCCACCTACCATGACCGACCGGGTGGCCAGTCCCTCTCCACA
 GTGGTATCCACAGCCACAGGCAATTTCTCAACCGCTGGTCCCCGCGGACCTGGAAGCTGGGACAG
 CAGGGAACATCTCCATGTGGCCGAGGGGACAAACCGCAGCACAGAGCCACCATCTGCCTGAGCAAGAT
 GGATATCGCTGGGTGATCCTGGCCATCAGCGTGCCTCTCCTCTGCTCTGTCTGCTGACGGTGTGC
 TGCATGAAGAGGAAGAAGAAGACCGCAACCCGGAGAACAACCTGAGCTACTGGAACAACACCATCACCA
 TGGACTACTTCAACAGGCATGCTGTGGAGCTGCCAGGGAGATCCAGTCCCTTGAACCTCTGAGGACCA
 GCTCTCAGAGCCCGCTCCCGCAATGGCGACTATAGAGACTGGGATGGTCTTGTAAACCCCTTC
 TGCAAGAAACTGTTTGTGGAAACGATCAAGTATCTGAGATC

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200953 protein sequence
 Red=Cloning site Green=Tags(s)

MKRSLQALYQLLSFLILALTEALAFIQEPSRESLQVLPSTPPGTMVTAPHSTRHTSVVMLTPNP
 DGPPSQAAAPMATPTPRAEGHPPHTHTISTIAATVTAPHSESSLSTGPAPAAMATSSKPEGRPRGQAAPT
 ILLTKPPGATSRPTTAPPRTTTRPPRPPGSSRKGAGNSSRPVPPAPGGHSRSKEGQRGRNPSSTPLGQK
 RPLGKIFQIYKGNFTGSVEPEPSTLTPRTPLWGYSSSPQPQVAATTVPSNTSWAPTTTSLGPAKDKPGL
 RRAAQGGSTFTSQGGTPDATAASGAPVSPQAAPVPSQRPHHGDQPQDGPSSHSWLVTPGTSRPLSTSS
 GVFTAATGPTPAAFDTSVSAPSQIPQASTTPQAPTHPSRVSESTISGAKEETVATLTMDRVPSPLST
 VVSTATGNFLNRLVPAGTWKPGTAGNISHVAEGDKPQHRATICLSKMDIAWVILAIISVPISSCSVLLTVC
 CMKRKKKTANPENNL SYWNNTITMDYFNRHVELPREIQSLETSEDQLSEPRSPANGDYRDTGMVLVNP
 CQETL FVGNQVSEI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6669_b04.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_023943

ORF Size: 1725 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_023943.4](#)

RefSeq Size: 3847 bp

RefSeq ORF: 1728 bp

Locus ID: 66000

UniProt ID: [Q6UXF1](#)

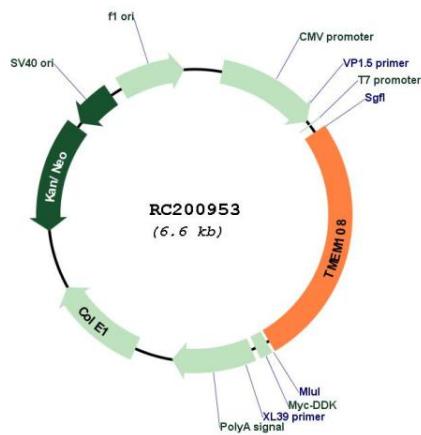
Cytogenetics: 3q22.1

Protein Families: Druggable Genome, Transmembrane

MW: 59.9 kDa

Gene Summary: Transmembrane protein required for proper cognitive functions. Involved in the development of dentate gyrus (DG) neuron circuitry, is necessary for AMPA receptors surface expression and proper excitatory postsynaptic currents of DG granule neurons. Regulates the organization and stability of the microtubule network of sensory neurons to allow axonal transport. Through the interaction with DST, mediates the docking of the dynein/dynactin motor complex to vesicle cargos for retrograde axonal transport. In hippocampal neurons, required for BDNF-dependent dendrite outgrowth. Cooperates with SH3GL2 and recruits the WAVE1 complex to facilitate actin-dependent BDNF:NTRK2 early endocytic trafficking and mediate signaling from early endosomes.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC200953