

Product datasheet for **RR203627**

Tmem175 (NM_001013991) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tmem175 (NM_001013991) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tmem175
Synonyms:	RGD1309712
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR203627 representing NM_001013991
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCAGGCTCCAGGTCCAGGAGCAGGCAGTGGATTCCGAGGGAGACTCATCCCTATACAGGAGAGATG
 AGGAGGGGACACAGAGCTCCACCCGCATGCTGGGCTTTAGTGATGCCTTACTATCCATCATCGCCACTGT
 CATGATCCTGCCTGTGACCCACACAGAGATCTCACCAGAACAGCAGTTTGACAAAAGTATACAGAAACTT
 CTAGCAACTAGGATTGCTGTCTACCTCATGACATTTCTAATCGTAACTGTGGCCTGGGCAGCACATACCA
 GATTGTTCCAGGTTGTTGGAAAAATAGATGATACACTTGCCTTGCCTCAACCTGGCCTGTATGATGACCAT
 CACCCCTTCTGCCCTACACATTTTCGCTAATGGTAACTTCCCTGATGTGCCCTGGGCATCTTCTGTTC
 TGCATGTGTGATTGCCATTGGATCTGTGCAGGCAATGATCGTGGGTTATGCCTTCCACTTCCACATC
 TGCTGAATCCACAAATCCAGTGTCTACACATAGGGCCCTGTCCCGCGGCACATTCTGCACCTAGTCTCT
 CCGTGGCCAGCACTCTGTTTTGTGACGTGTCTTTCCCTCTTCTTCCCCTTGCATACCTGCTG
 ATGGTGACTGTACTTCTCCCTCACATCAGCAAGGCTACCACCTGGTGTAAAGACAAGTTTATGGGCC
 ACAGGGAGTCTCCAGCTACAATGTAGAGCCCTCAGTATTGACCTGCATGCGCCCTCAGCAAAGAACG
 GGTGGAAGCTTTTCAAGTACGGTGTCTATGCCATTGTGGCCACACTCCTCATCTTGGACATCTGTGAGGAC
 AATGTTCCGGATCCCAAGGATGTGCAACAGAAGTTCAGTGGCAGCCTTGTGGCTGCCCTGGGTGCATATG
 GGCCACAGTTCCTGGCATACTTCGGCTCCTTCGCCACAGTGGGTCTGCTCTGGTTTGGCCACCACTCACT
 CTTCTGCATGTCCGGAAGGCTACACAGACCATGGGGTTGTTCAACATACTGTACTGGCCTTTGTGGGG
 GGCCCTCCCTCTGGCTACCAGCAGACCTCGGCGTTTGGCCGCAACCCCGTGAACCTGAGCCTGTGCA
 CCAGAGAGAAACACTGCAGCCAGCTGTGCAGTTTGGTGGCAGGAACATGCTTTTCATGTTTGCACAGCTC
 GCACTGTACCCCTGTGCCAGCCTGCTGGCCTTTCGCCACCTGCCTACTGAGTCGGTTCAGCACAGCCA
 TCTTCCACCTCATGCAGATTGCAGTGCCTTTGCGTTCCTGTTGCTCCGCTCCTGGTACGCTTGCCT
 GGCAGGCCTTCAAGTCTATGGACCTCTGGCCAGAGCGTCCCCAACAGACCAGGGTGAACCCGAGACA
 CAGTCCCAGCTCTGCCTGCCTCTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR203627 representing NM_001013991
 Red=Cloning site Green=Tags(s)

MSRLQVQEAVDSEGDSSLYRRDEEGTQSSHRMLGFSALLSIIATVMILPVTHTTEISPEQQFDKSIQKL
 LATRIAVYLMFTLIVTVAAHTRLFQVVGKIDDTLALLNLACMMITLLPYTFSLMVTFPDVPGLGIFLF
 CMCVIAIGSVQAMIVGYAFHFPHLLNPQIQCSTHRALSRRHILHLVLRGPALCFVAAVSLFFFPLSYLL
 MVTVIFLPHISKATTWCKDKFMGHRESPAHNVEPFSIDLHAPLSKERVEAFSDGVYAIIVATLLILDICED
 NVPDPKDVQKFSGLVAALGAYGPQFLAYFGSFATVGLLWFAHHSFLHVRKATQTMGLFNILSLAFVG
 GLPLAYQTSFAFRQPRDELERVRSIAIFASIFQFAIWTALLHQRETLQPAVQFQQEHAFFAKL
 ALYPCASLLAFAATCLLSRFSTAIFFHLMQIAVPPAFLLLRLLVRLALAGLQVLWDLWPERPQQDQGEPEP
 QSLLPASC

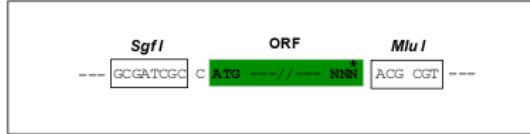
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

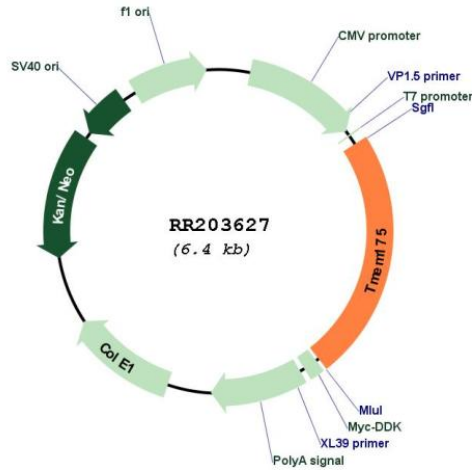
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001013991

ORF Size: 1497 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_001013991.1](#), [NP_001014013.1](#)

RefSeq Size: 1836 bp

RefSeq ORF: 1500 bp

Locus ID: 305623

UniProt ID: [Q6AY05](#)

Cytogenetics: 14p22

MW: 55.7 kDa

Gene Summary: Organelle-specific potassium channel specifically responsible for potassium conductance in endosomes and lysosomes. Forms a potassium-permeable leak-like channel, which regulates luminal pH stability and is required for autophagosome-lysosome fusion. Constitutes the major lysosomal potassium channel.[UniProtKB/Swiss-Prot Function]