

Product datasheet for **RC201422**

Transmembrane Protein 175 (TMEM175) (NM_032326) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Transmembrane Protein 175 (TMEM175) (NM_032326) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Transmembrane Protein 175
Synonyms:	hTMEM175
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC201422 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCCCAGCCCCGACCCAGAGCAGGCACTGGATACACCGGGGACTGCCCCAGGCAGGAGAGACG
 AGGACGCTGGGGAGGGGATCCAGTGCTCCAACGCATGCTCAGCTTCAGTGACGCCCTGCTGCCATCAT
 CGCCACCGTCATGATCCTGCCTGTGACCCACACGGAGATCTCCCCAGAACAGCAGTTCGACAGAAGTGTA
 CAGAGGCTTCTGGCAACACGGATTGCCGCTACCTGATGACCTTTCTCATCGTGACAGTGGCCTGGGCAG
 CACACACAAGGTTGTTCCAAGTTGTTGGGAAAACAGACGACACTTGCCTGCTCAACCTGGCCTGCAT
 GATGACCATCACCTTCTGCCTTACACGTTTTCGTTAATGGTGACCTTCCCTGATGTGCCTCTGGGCATC
 TTCTTGTCTGTGTGTGTGATCGCCATCGGGTCTGCAGGCACTGATTGTGGGTACGCATTCCACT
 TCCCGCACCTGCTGAGCCCGAGATCCAGCGCTCTGCCACAGGGCTCTGTACCGACGACACGCTCTGGG
 CATCGTCTCCAAGGCCCGCCCTGTGCTTTCAGCGGCCATCTTCTCTCTTCTTTGCCCCCTTGTCT
 TACCTGCTGATGGTGACTGTCATCTCCTCCCCTATGTCAGCAAGGTACCGGCTGGTGCAGAGACAGGC
 TCCTGGGCCACAGGGAGCCCTCGGCTCACCCAGTGAAGTCTTCTCGTTTGACCTCCACGAGCCACTCAG
 CAAGGAGCGCGTGAAGCCTTACGCGACGGAGTCTACGCCATCGTGGCCACGCTTCTCATCTGGACATC
 TGCGAAGACAACGTCCTCCGACCCCAAGGATGTGAAGGAGAGGTTACGCGGAGCCCTCGTGGCCGCCCTGA
 GTGCGACCGGGCCGCGCTTCTGGCGTACTTCGGCTCCTTCGCCACAGTGGGACTGCTGTGGTTCGCCCCA
 CCACTCACTTCTCTGCATGTGCGCAAGGCCACGCGGGCCATGGGGTCTGTAACACGCTCTCGCTGGCC
 TTCGTGGTGGCTCCCACTAGCCTACCAGCAGACCTCGGCCCTTCGCCCGGACGCCCCGCGATGAGCTGG
 AGCGCGTGGTGTGAGTGCACCATCATCTTCTTCCAGCAGCATCTCCAGCTGGCCATGTGGACACGCG
 GCTGCTGCACCAGCGGAGACGCTGCAGCCCTCGGTGTGGTTTGGCGGCCGGGAGCATGTGCTCATGTTT
 GCCAAGCTGGCGCTGTACCCCTGTGCCAGCCTGCTGGCCTTCGCCTCCACCTGCCTGCTGAGCAGTTCA
 GTGTGGGCATCTTCCACCTCATGCAGATCGCCGTGCCCTGCGCCTTCTGTTGCTGCGCCTGCTCGTGGG
 CCTGGCCCTGGCCACCCTGCGGGTCTGCGGGGCTCGCCCGGCCGAACACCCCCGCCAGCCCCCAGC
 GGCCAGGACGACCCACAGTCCCAGCTCCTCCTGCCCTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201422 protein sequence
 Red=Cloning site Green=Tags(s)

MSQPRTPPEQALDTPGDCPPGRRDEDAGEGIQCSQRMLSFSDALLSIIATVMILPVTHTTEISPEQQFDRSV
 QRLLATRIAVYLMFTLIVTVAWAHTRLFQVVGKTDLALLNLACMMITFLPYTFSLMVTFFPDVPLGI
 FLFCVCVIAIGVVQALIVGYAFHFPHELLSPQIQSAHRALYRRHVLGIVLQGPALCFAAAIFFSLFFVPLS
 YLLMVTVILLPYVSKVTGWCRDRLLGHREPSAHPVEVFSFDLHEPLSKERVEAFSDGVYAI VATLLILD
 CEDNVPDPKDVKERFSGSLVAALSATGPRFLAYFGSFATVGLLWFAHSLFLHVRKATRAMGLLNTLSLA
 FVGGPLLAYQQTSAFARQPRDELERVVRSCTIIFLASIFQLAMWTTALLHQAETLQPSVWFGGREHVL
 MF AKLALYPCASLLAFASCTLLSRFSVGI FHLMQIAVPCAFLLRLLVGLALATLRVLRGLARPEHPPAPT
 QDDPQSQLLPAPC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6572_b11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_032326

ORF Size: 1512 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_032326.2](#), [NP_115702.1](#)

RefSeq Size: 1884 bp

RefSeq ORF: 1515 bp

Locus ID: 84286

UniProt ID: [Q9BSA9](#)

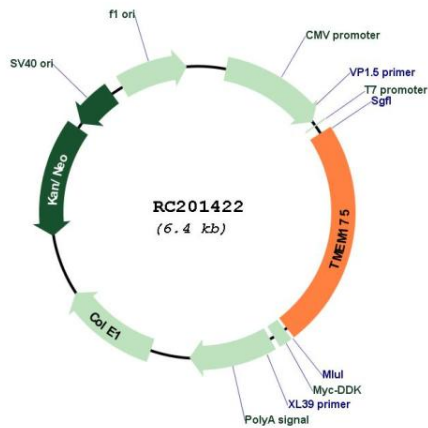
Cytogenetics: 4p16.3

Protein Families: Transmembrane

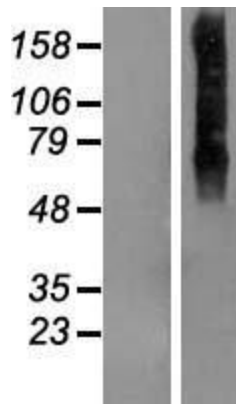
MW: 55.6 kDa

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]

Product images:



Circular map for RC201422



Western blot validation of overexpression lysate (Cat# [LY410202]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201422 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).