

Product datasheet for **MG213249**

Tmem175 (NM_028223) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tmem175 (NM_028223) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tmem175
Synonyms:	3010001K23Rik; AI504381; mTMEM175
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG213249 representing NM_028223
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCAGGCTCCAGACTGAGGAGCAGGCAGTGGATTCCGAGGGAGACTCATCCCTACACAGGAGAAATG
 AGGAGGGGACACAGAGCTCCACCGCATGCTGGGCTTCAGTGATGCACTGCTATCCATCATCGCCACTGT
 CATGATCCTGCCTGTGACCCACACAGAGATCTCACCAGAACAGCAGTTTGACAAAAGTATACAGAAACTC
 CTAGCAACTAGGATCGTGTCTACCTCATGACATTTCTAATCGTAACTGTGGCCTGGACAGCACATACCA
 GATTGTTCCAGGTTGTTGGAAAAATAGATGATACACTTGCCTTGCTCAACCTGGCCTGTATGATGACTAT
 CACCTCTGCCCTACACATTTTACTAATGGTAACTCCCTGATGTGCCCTGGGCATCTTCTGTTC
 TGCGTGTGTGTGATCGCCATTGGATCTGTGCAGGCAATGATTGTGGGCTATGCCTTCCACTTCCACATC
 TGCTGAATCCACAAATCCAGTGTCTACACGTAGGGATCTATCCCGCGGCATATCCTGCACCTGGTCT
 CCGTGGCCAGCAGTGTGTTTTGTGCGGCTGTCTTTCCCTCTTCTTCCCCTTGTGCATACCTGCTG
 ATGGTGACTGTACTTCTCCCTCACATCAGCAAGGCTACCACCTGGTGCAAAGACAAGTTGATGGGCC
 AAAGGGAGTCTCCAGCTCACGACATGGAGCCCTCAGTATTGACCTGCATGCGCCCTCAGCAAAGAGCG
 GGTGGAAGCTTTCAGCGACGGTGTCTATGCCATCGTGGCCACACTCCTCATCCTGGACATCTGTGAGGAC
 AATGTTCCGGATCCCAAGGATGTGCAAGAGAAATTCAGTGGCAGCCTTGTGGCTGCCCTGGGTGCATATG
 GGCCACAATTCTTGGCATACTTCGGCTCCTTCGCCACAGTGGGTCTCCTGTGTTTGTCTACCATTCACT
 CTTCTGCATGTCCGGAAGGCTACACAGACCATGGGGTACTCAACATACTATCGCTGGCCTTTGTGGGT
 GGCTTCTCTGGCCTACCAGCAGACCTCAGCTTTTGGCCGCAACCCCATGATGAACCTGAGCGTGTGC
 TCAGACAGAAACACTGCAGCCAGCTGTGCAATTTGGTGGCAGGAGCATGCTTTCATGTTTGCCAAGCTT
 GCACTGTATCCCTGTGCCAGCCTGCTGGCCTTGTGCCACCTGCCTACTGAGTCGTTTTCAGCACAGCCA
 TCTTCCACCTCATGCAGATTTCACTGCCCCTTGTGATTCTGTTGCTCCGCTCCTTGTACGCTTGGCCT
 GGCAGGCCTTCAAGTCTACGGGGCCTCTGGCCACACCATCCCCAACAGACCAGAGTGAACCTGAGGCA
 CAGTCCCAGCTCTGCTGACCCCTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG213249 representing NM_028223
 Red=Cloning site Green=Tags(s)

MSRLQTEEQAVDSEGDSSLHRRNEEGTQSSHRMLGFS DALLSIIATVMILPVTHTEISPEQQFDKSIQKL
 LATRIAVYLMFTLIVTVAWTAHTRLFQVVGKIDDTLALLNLACMMTITLLPYTFSLMVTFPDVPPLGIFLF
 CVCVIAIGSVQAMIVGYAFHFPHLLNPQIQCSTRRDLRRRHILHLVLRGPALCFVAAVFSLFFFPLSYLL
 MVTVIFLPHISKATTWCKDKLMGQRESPAHDMEPFIDLHAPLSKERVEAFSDGVYAI VATLLILDICED
 NVPDPKDVQEKFSGLVAALGAYGPQFLAYFGSFATVGLLWFAHHSFLHVRKATQTMGLLNILSLAFVG
 GLPLAYQQTSFAFARQPHDELERVRVSCAIIFFASIFQFAIWTTALLHQETELQPAVQFGGQEHAFMFAKL
 ALYPCASLLAFAATCLLSRFSTAIIFHLMQISVPF AFLLLRLLVRLALAGLQVLRGLWPHHPQDQSEPEA
 QSQLLPDPC

TRTRPLE - GFP Tag - V

Restriction Sites:

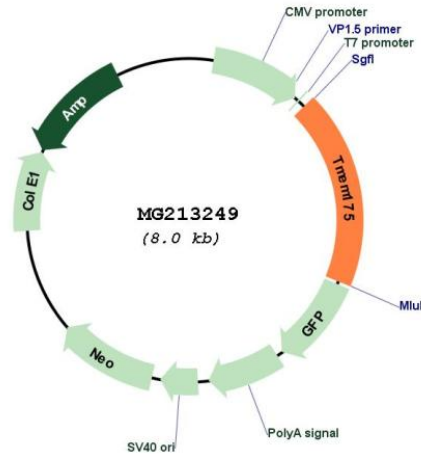
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_028223

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_028223.2](#)

RefSeq Size: 3073 bp

RefSeq ORF: 1500 bp

Locus ID: 72392

UniProt ID: [Q9CXY1](#)

Cytogenetics: 5 F

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]