

Product datasheet for **MG211157**

Tmem16b (BC033409) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tmem16b (BC033409) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tmem16b
Synonyms:	MGC38715
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG211157 representing BC033409
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCACCTTTCACGACAACACAGAGAAAGTCGACTATGTACTTGCATACCACTACCGAAACGAGGCGCAC
 ACCTGGGTCACGGCTCCCCTGGACTCTCTGGCTGTTATCTCCAATGGGAGACAGGCAAGGAGCGCCA
 TGGCGGGGGCCCTGGTGTGTTGAACTTGGGCCACTGGATGCTCTGGAAGAGAAAAGGAGGGAGCAGCGA
 GATGAATTTGAGCACAACCTGATGGCTGCTGGGCTGGAGCTGGAGAAGGACTTGGAGAGCAAAAGCCAGG
 GATCTGTCTTTGTCGGATCCACGCCCCATGGCAGGTGCTGGCCAGGGAAGCAGAGTTCTTGAAGATCAA
 AGTCCCCACCAAGAAAATGTACGAGATCAAAGCAGGAGGCAGCATCGAAAAGATTCAGCGCCATTCTG
 CAGACGCTCAGTTCACCCCTGCAGCCAGAGTTCCTGAACACAGCAACAACAGGATGAAAAACCTCTCT
 ACCCATTCTCAGGAAAAAATGTACCTGTATAACATCCAGGAAAAGACACCTTCTTTGACAATGCTAC
 CCGGAGCCGATTGTACACGAGATTCTGAAGCGGACGGCCTGTTCTCGAGCCAACAACACGATGGGTATT
 AACTCTCTAATAGCAAACAATATCTACGAGGCTGCCTACCCGCTTCATGATGGTGAATATGACAGTCCAG
 GGGATGACATGAATGACAGAAAGCTGCTGTATCAGGAATGGGCACGCTATGGAGTGTTCACAAATTTCA
 ACCCATTGACCTCATCAGGAAGTATTTGGAGAGAAAAATGGGCTATATTTGCTTGGCTGGGGTTGTAT
 ACATCATTCTGATCCCATCTTCTGTATAGGCGTGATTGTGTTTCTTTATGGATGTGCAACAATCGAGG
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 ACCGCTTCTTTTCCATCTTCACTGGCTCTGTGGGCTACCATGTTCTGGAAAACCTGGAAGAGACTCCAGA
 TGCGGTTGGGCTACTTCTGGGACTGACTGGGATCGAAGAGGAAGAAGAACGTTCCAGGAAACACTCTCG
 GCCTGAATATGAAACCAAGTACGAGAGAAACTGTTAAAGGAGAGTGGCAAGTCAGCGGTTCAAGAGCTG
 GAAGCAAATTCACCTGAGGATGATGAGGATGATGAAGATAAACTGACTTGGAAAGATCGTTTCCAGGAT
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 GTATCGGATCACAACTGCAGCTGCCCTGTCTCTCAACAAGGCCACACGCTCCAATGTCCGGGTGACAGTG
 ACTGCAACAGCAGTCATCATCAACCTCGTGGTCATCCTCATCTTGGATGAGATCTATGGTGTGTGGCCA
 AGTGGCTTACCAAAATCGAGGTTCCGAAAACAGAACAGACTTTTGAAGAACGTTGATCCTCAAAGCTTT
 CTTGCTCAAGTTTGTCAATGCCTACTCCCCATCTTCTATGTGGCCTTTTCAAGGGGAGGTTTGTGGGC
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 TGGAGCTGTGCATCCAACCTCAGCATCATATGTTGGGCAAGCAGCTGATCCAGAACAATATCTTTGAGAT
 TGGAGTCCCGAAGCTAAAGAAAACCTTTTCGGAAGCTGAAAGATGAGACAGAGCCTGGAGAAAAGTGACCT
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 CTTTGTATCATCTTCCAGAACCTAGTGATGTTCTGAGTGTCTTGGTGGACTGGATGATCCGGATATC
 CCCACTGACATCAGCGACCAGATCAAGAAAGAGAAGAGCTTGCTGGTAGACTTCTTTCTGAAGGAGGAGC
 ATGAGAAGGTCAAGCTGGCTGATGAGCCACCCAGAGGAGCCAGGGAGGTGGGGATCGGAGCAGGAGGAG
 CCGTGCAGCCAGCTCTGCACCATCAGGCCGGAGCCAGCCAGGCAGCATAGCATCCTCAGGTTCCAGCAC
 ACCAATGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG211157 representing BC033409
Red=Cloning site Green=Tags(s)

MHFHDNRKVDYVLAHYRKRGAHLGHGSPGHSLAVISNGETGKERHGGGPGDVELGPLDALEEERREQR
 DEFEHNLMAAGLELEKDLSEKSSQGSVFRVHAPWQVLAREAFLKIKVPTKKMYEIKAGGSIKKFSAIL
 QTLSSPLQPRVPEHSNNRMKNLSYPPSREKMYL YNIQEKTFFDNATRSRIVHEILKRTACSRANNTMGI
 NSLIANNIYEAAYPLHDGEYDSPGDDMNDRLKLLYQEWARYGVFYKFPIDLIRKYFGEKIGLYFAWLGLY
 TSFLIPSSVIGIVFLYGCATIEEDIPSKEMCDHQNAFTMCPLCDKSCDYWNLSSACGTARASHLFDNPA
 TVFFSIFMALWATMFLENWKRLQMLRGYFWDLTGIEEEEEERSQEHSRPEYETKVRKLLKESGKSAVQKL
 EANSPEDEDEDKLTWKDRFPGYLMNFASILFMIALTFSIVFGVIVYRITTAALSLNKATRSNVRVTV
 TATAVIINLVVILILDEIYGAVAKWLTKIEVPKTEQTFEERLILKAFLLKFNAYSPIFYVAFFKGRFVG
 RPGSYVYVFDGYRMEECAPGGCLMELCIQLSIIMLGKQLIQNNIFEIGVPKLLKFRKLDKETEPGESDP
 DHSKRPEQWDLHSLPEYTGLTPEYMEMIIQGFVTLFVASFPLAPV FALLNNVIEVRLDAKKFVTELRR
 PDAVRTKDIGIWFILSGIGKFSVIINAFVIAVTSDFIPRLVYQYSYSHNGTLHGFVNHTLSFFNVSQLK
 EGTQPENSQFDQEVQFCRFKDYREPPWAPNPYEF SKQYWSVLSARLAFVIFQNLVMFLSVLVDWMIPDI
 PTDISDQIKKEKSLLVDFFLKEEHEKVKLADEPTQRSQGGDRSRRSRAASSAPSGRSQPGSIASSGSQH
 TNV

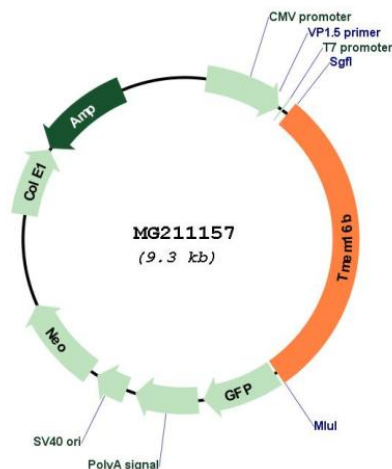
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: BC033409

ORF Size: 2741 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: [BC033409](#), [AAH33409](#)

RefSeq Size: 3544 bp

RefSeq ORF: 2741 bp

Locus ID: 243634

Cytogenetics: 6 F3

Gene Summary:

Calcium-activated chloride channel (CaCC) which may play a role in olfactory signal transduction. Odorant molecules bind to odor-sensing receptors (OSRs), leading to an increase in calcium entry that activates CaCC current which amplifies the depolarization of the OSR cells, ANO2 seems to be the underlying chloride channel involved in this process. May mediate light perception amplification in retina.[UniProtKB/Swiss-Prot Function]