

Product datasheet for RC239867

TMEM16B (ANO2) (NM_001278597) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | TMEM16B (ANO2) (NM_001278597) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | TMEM16B |
| Synonyms: | C12orf3; TMEM16B |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC239867 representing NM_001278597 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTGAAGATATACCCCTGCTCCCTGGCTCCCCACGCCGGCTGAGCCCTCAGGCAGGGTCCAGAGGGG
GCCAGGGCCCCAAACATGGACAGCAGTGTCTCAAGATGCCAGGTCCCGGGCCCCAGGTCTGCAGGGCGG
TTCCAACAGAGATCCTGGCCAGCCCTGCGGTGGAGAGAGCACCCGCAGCAGCTCTGTCATCAACAATAT
CTGGATGCCAATGAGCCTGTGTCCTTGGAGGCCGCTTAGCCGCATGCACCTCCATGACAGTCAGAGGA
AGGTCGACTATGTACTTGCTACCACTACCGAAACGCGGGTGCACCTGGCCAAAGCTTCCCTGGCCA
CTCGCTGGCTATCGTCTCCAATGGGGAGACAGGCAAGGAGCCTCATGCTGGGGGCCAGGTGACATTGAG
CTGGGACCGCTCGATGCCTGGAGGAGGAGGAAGGAGCAGCGGGAGGAATTTGAGCACAATCTGATGG
AGGCTGGACTGGAGCTTGAGAAGGACTTGAGAAATAAAAGCCAGGGATCCATCTTTGTCGGATACACGC
CCCGTGGCAGGTGCTGGCCAGAGAGGCAGAATTCTGAAGATCAAAGTTCCTACCAAGAAAGAGATGTAC
GAGATCAAAGCAGGAGGCAGCATTGCAAAGAAGTTCAGCGCGCTCTGCAGAAGCTGAGCTCGCACCTGC
AGCCCCGAGTTCAGAACACAGCAACAACAAGTGA AAAAACCCTCCTACCCATTCTCCAGGGAGAAGAT
GTACCTGTACAACATCCAGGAAAAGGACACCTTTTGTATAATGCCACCCGACCCGATTGTGCACGAG
ATCCTGAAGCGCACAGCCTGCTCCGAGCCAACAACAGATGGGTATTAACCTCTGATCGCAAACAATA
TCTATGAGGCTGCCTACCCTCTTCATGACGGTGAATACGATAGTCCAGAGGACGATATGAATGACAGGAA
GCTGCTATATCAAGAATGGGCGCCTATGGAGTGTCTATAAGTTCCAACCTATTGACCTCATCAGAAAG
TATTTTGGAGAAAAAATTGGACTGTATTTGCCTGGTGGGATTATATACATCATTCCCTCATCCCCTCTT
CTGTAATTGGAGTGATTGTGTTTCTTTATGGATGTGCAACAATTGAAGAAGATATCCCAGCAGAGAGAT
GTGTGACCAGCAGAATGCCTTACCATGTGTCCCTGTGTGACAAGTCTGTGATTACTGGAACCTCAGC
TCAGCCTGTGGGACCGCGCAGGCCAGCCACCTGTTTGACAACCCTGCCACCGTCTTCTCTATCTTCA
TGGCTCTGTGGGCTACCATGTTCTGAAAACCTGGAAGAGGCTACAGATGCGACTGGGCTACTTTTGGGA
CCTGACTGGCATAGAAGGGAAGAAGACGTGCCAGGAACATCCAGGCCTGAGTATGAAACCAAAGTT



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CGAGAGAAAATGCTAAAGGAGAGCAACCAAGTCTGCTGTCCAGAAAATTGGAAACAAACACGACGGAGTGTG
 GCGATGAGGATGATGAAGATAAACTGACCTGGAAGGATCGTTTCCAGGTTACCTGATGAACTTTGCCTC
 CATCTTATTATGATTGCCCTGACATTCTCAATCGTCTTTGGGGTATAGTGTATCGAATAACAACCTGCA
 GCCGCTCTGTCTCTCAATAAGGCTACACGCTCCAATGTCCGGGTGACAGTGACAGCAACAGCAGTCATCA
 TCAACCTCGTGGTCATCCTCATCTGGACGAGATCTACGGCGCTGTGGCCAAGTGGCTCACCAAAATTGA
 GGTTCCGAAAACAGAACAGACTTTTGAAGAGCGCCTGATCCTCAAAGCTTTCTTGCTCAAGTTTGTCAAT
 GCCTACTCCCCATCTTCTATGTGGCCTTTTTCAAAGGGAGGTTTGTGGGAGGCTGGAAGCTACGCTCT
 ATGTATTTCGATGGTTACCGCATGGAAGAGTGTGCTCCAGGGGGCTGTCTCATGGAGCTCTGCATTACGCT
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 AAATAATTTGAAAGCTGAAAGATGAGACCGAAGCTGGAGAACTGACTCTGCCATTGAAACATCCAG
 AGCAGTGGGACCTAGACTACAGCTTGAACCATACACAGGACTGACTCCGGAGTACATGGAATGATCAT
 CCAGTTTGGTTTTGTACCCTCTTCGTGGCCTCCTTCCCTGGCACCTGTGTTTGCCTCTCAACAAC
 GTCATTGAAGTGGGCTCGATGCAAAGAAGTTTGTACAGAGCTGAGACGGCCGGATGCTGTAAGAACCA
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 ACTCACAGTTTGACCAGGAGTTTCAAGTTTGCAGGTTTAAAGGATTACCGAGAGCCGCATGGGCCCGAA
 CCCTTATGAGTTTTGAAACAGTACTGGTTTATTCTGTCCGCCCTGTGGCTTTTGTGATAATCTCCAG
 AACCTCGTGTATTTCTGAGCGTCTCTGTGGACTGGATGATTCCAGACATCCCCACGGACATCAGCGACC
 AGATCAAGAAAGAGAAGAGCTTATTAGTGGATTCTTCTGAAAGAGGAGCATGAGAAGCTCAAGCTGAT
 GGATGAGCCGGCTCTGAGGAGCCAGGAGGTGGGGATCGAAGCAGGAGCCGGGACGCCAGCTCAGCACCT
 TCAGGCCAAAGCCAGCTGGGCAGCATGATGTGTCAGGCTCTCAGCACACCAATGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC239867 representing NM_001278597
 Red=Cloning site Green=Tags(s)

MPEDIPLPGSPRRLSPQAGSRGGQPKHGQOCLKMPGPRAPGLQGGSNRDPGQPCGGESTRSSVINNY
 LDANEPVSL EARLSRMHFHDSQRKVDYVLAHYRKRGVHLAQGFPGHSLAIVSNGETGKEPHAGGPDIE
 LGPLDALEEERKEQREEFEHNLMEAGLELEKDLENKSQGSIFVRIHAPWQVLAREAEFLKIKVPTKKEMY
 EIKAGGSIAKKFS AALQKLSHLQPRVPEHSNNKMKNL SYPFSREKMYL YNIQEKDTFFDNATRSRIVHE
 ILKRTACSRANNTMGINSLIANNIYEAAYPLHDGEYDSPEDDMNDRKLLYQEWARYGVFYKQPIDLIRK
 YFGEKIGLYFAWLGLYTSFLIPSSVIGVIVFLYGCATIEEDIPSREMCDQQAFTMCPLCDKSCDYWNLS
 SACGTAQASHLFDNPATVFFSIFMALWATMFLENWKRLQMRLYGFWDLTGIEEEEEERAQEHRSPEYETKV
 REKMLKESNQSAVQKLENTTECGDEDEDKLTWKDRFPGYLMNFASILFMIALTF SIVFGVIVYRITTA
 AALSLNKATRSNVRVTATAVIINLVILILDEIYGAVAKWLTKEVPKTEQTFEERLILKAFLLKFN
 AYSPIFYVAFFKGRFVGRPGSYVYVFDGYRMEECAPGGCLMELCIQLSIIMLGKQLIQNNIFEIGVPKLK
 KLFRKLKDETEAGETDSAHSKHPEQWLDYSLEPYTGLTPEYMEMIIQGFVTLFVASFPLAPVALLNN
 VIEVRLDAKKFVTELRRPDAVRTKDIGIWFIDILSGIGKFSVISNAFVIAITSDFIPRLVYQYSYSHNGTL
 HGFVNHTLSFFNVSQLEKGTQPENSQFDQEVQFCRFKDYREPPWAPNPYEF SKQYWFILSARLAFVIFIQ
 NLVMFLSVLVDWMIPDIPTDISDQIKKEKSLLVDFFLKEEHEKLLMDEPALRSPGGDRSRRAASSAP
 SGQSQLGSMSSGSQHTNV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001278597

ORF Size: 2997 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001278597.3](#)

RefSeq Size: 3729 bp

RefSeq ORF: 3000 bp

Locus ID: 57101

UniProt ID: [Q9NQ90](#)

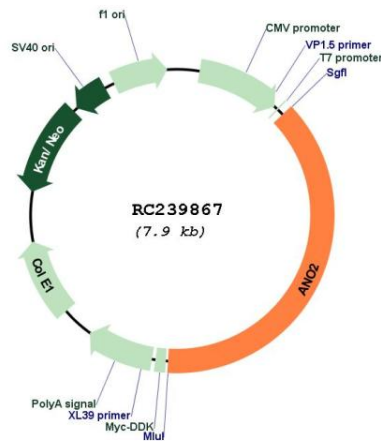
Cytogenetics: 12p13.31

Protein Families: Transmembrane

MW: 114.1 kDa

Gene Summary: ANO2 belongs to a family of calcium-activated chloride channels (CaCCs) (reviewed by Hartzell et al., 2009 [PubMed 19015192]).[supplied by OMIM, Jan 2011]

Product images:



Circular map for RC239867