

Product datasheet for RC222601

TMEM16B (ANO2) (NM_020373) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM16B (ANO2) (NM_020373) 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:	>RC222601 representing NM_020373 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTGAAGATATACCCCTGCTCCCTGGCTCCCCACGCCGGCTGAGCCCTCAGGCAGGGTCCAGAGGGG
GCCAGGGCCCCAAACATGGACAGCAGTGTCTCAAGATGCCAGGTCCCGGGCCCCAGGTCTGCAGGGCGG
TTCCAACAGAGATCCTGGCCAGCCCTGCGGTGGAGAGAGCACCCGCAGCAGCTCTGTCATCAACAACTAT
CTGGATGCCAATGAGCCTGTGTCCTTGGAGGCCGTCTTAGCCGCATGCACCTCCATGACAGTCAGAGGA
AGGTCGACTATGTACTTGCTACCACTACCGAAACGCGGGTGCACCTGGCCAAAGCTTCCCTGGCCA
CTCGCTGGCTATCGTCTCCAATGGGGAGACAGGCAAGGAGCCTCATGCTGGGGGCCAGGTGACATTGAG
CTGGGACCGCTCGATGCCTGGAGGAGGAGGAAGGAGCAGCGGGAGGAATTTGAGCACAATCTGATGG
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CCCGTGGCAGGTGCTGGCCAGAGAGGCAGAATCTTGAAGATCAAAGTTCCTACCAAGAAAGAGATGTAC
GAGATCAAAGCAGGAGGCAGCATTGCAAAGAAGTTCAGCGGGCTCTGCAGAAGCTGAGCTCGCACCTGC
AGCCCCGAGTTCAGAACACAGCAACAACAAGTGA AAAAACCCTCCTACCCATTCTCCAGGGAGAAGAT
GTACCTGTACAACATCCAGGAAAAGGACACCTTTTGTATAATGCCACCCGTAGCCGATTGTGCACGAG
ATCCTGAAGCGCACAGCCTGCTCCCGAGCCAACAACAGATGGGTATTAACCTCTGATCGCAAACAATA
TCTATGAGGCTGCCTACCCTCTTCATGACGGTGAATACGATAGTCCAGAGGACGATATGAATGACAGGAA
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TATTTTGGAGAAAAAATGGACTGTATTTGCCTGGTGGGATTATATACATCATTCCCTCATCCCATCTT
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CCTGACTGGCATAGAAGGGAAGAAGAAGTGGCCAGGAACATCCAGGCCTGAGTATGAAACCAAAGTT



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CGAGAGAAAATGCTAAAGGAGAGCAACCAAGTCTGCTGTCCAGAAAATTGGAAACAAACACGACGGAGTGTG
 GCGATGAGGATGATGAAGATAAACTGACCTGGAAGGATCGTTTCCAGGTTACCTGATGAACTTTCCTC
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 GGTTCCGAAAACAGAACAGACTTTTGAAGAGCGCCTGATCCTCAAAGCTTTCTTGCTCAAGTTTGTCAAT
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 AGATCAAGAAAGAGAAGAGCTTATTAGTGGATTCTTCTGAAAGAGGAGCATGAGAAGCTCAAGCTGAT
 GGATGAGCCGGCTCTGAGGAGCCAGGAGGTGGGGATCGAAGCAGGAGCCGGGACGCCAGCTCAGCACCT
 TCAGGCCAAAGCCAGCTGGGAGCATGATGTCGTCAGGCTCTCAGCACACCAATGTG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222601 representing NM_020373
 Red=Cloning site Green=Tags(s)

MPEDIPLPGSPRRLSPQAGSRGGQPKHGQOCLKMPGPRAPGLQGGSNRDPGQPCGGESTRSSVINNY
 LDANEPVLSLEARLSRMHFHDSQRKVDYVLAHYRKRGVHLAQGFPGHSLAIVSNGETGKEPHAGGPGDIE
 LGPLDALEEERKEQREEFEHNLMEAGLELEKDLENKSQGSIFVRIHAPWQVLAREAEFLKIKVPTTKEMY
 EIKAGGSIAKKFSAAALQKLSHLQPRVPEHSNNKMKNL SYPFSREKMYL YNIQEKDTFFDNATRSRIVHE
 ILKRTACSRANNTMGINSLIANNIYEAAYPLHDGEYDSPEDDMNDRKLL YQEWARYGVFYKQPIDLIRK
 YFGEKIGLYFAWLGLYTSFLIPSSVIGVIVFLYGCATIEEDIPSREMCDQQAFTMCPLCDKSCDYWNLS
 SACGTAQASHLFDNPATVFFSIFMALWATMFLENWKRLQMRLYGFWDLTGIEEEEEERAQEHRSPEYETKV
 REKMLKESNQSAVQKLENTTECGDEDEDKLTWKDRFPGYLMNFASILFMIALTF SIVFGVIVYRITTA
 AALSLNKATRSNVRVTATAVIINLVILILDEIYGAVAKWLTKEVPKTEQTFEERLILKAFLLKFN
 AYSPIFYVAFFKGRFVGRPGSYVYVFDGYRMEECAPGGCLMELCIQLSIIMLGKQLIQNNIFEIGVPKLK
 KLFRKLKDETEAGETDSAHSKHPEQWDLDSLEPYTGLTPEYMEMIIQFGFVTLFVASFPLAPVALLNN
 VIEVRLDAKKFVTELRRPDAVRTKDIGIWFIDILSGIGKFSVISNAFVIAITSDFIPRLVYQYSYSHNGTL
 HGFVNHTLSFFNVSQKLEGTQPENSQFDQEVQFCRFKDYREPPWAPNPYEF SKQYWFILSARLAFVIFIQ
 NLVMFLSVLVDWMIPDIPTDISDQIKKEKSLLVDFFLKEEHEKLLMDEPALRSPGGDRSRRAASSAP
 SGQSQLGSMSSGSQHTNV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8010_b12.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_020373

ORF Size: 2997 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.

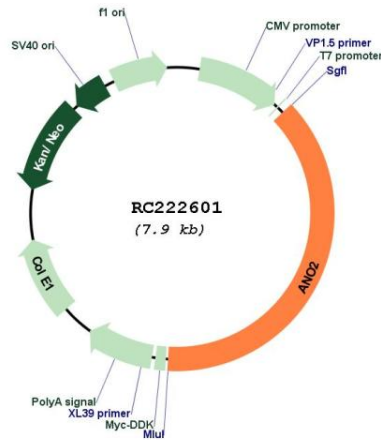
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_020373.1](#), [NP_065106.1](#)

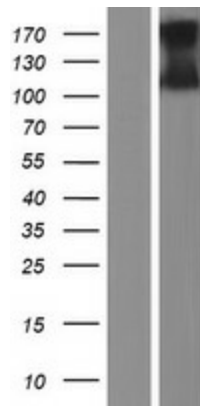
RefSeq Size: 3717 bp

RefSeq ORF:	2996 bp
Locus ID:	57101
Cytogenetics:	12p13.31
Protein Families:	Transmembrane
MW:	113.3 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 RC222601



Western blot validation of overexpression lysate (Cat# [LY412515]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222601 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).