

Product datasheet for **RC213098**

TMEM16A (ANO1) (NM_018043) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM16A (ANO1) (NM_018043) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TMEM16A
Synonyms:	DOG1; ORAOV2; TAOS2; TMEM16A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC213098 representing NM_018043
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGGTCAACGAGAAGTACTCGACGCTCCCGGCCGAGGACCGCAGCGTCCACATCATCAACATCTGCG
 CCATCGAGGACATCGGCTACCTGCCGTCGAGGGCAGCTGCTGAACTCCTTATCTGTGGACCTGATGC
 CGAGTGAAGTATGGCCTGTACTTCAGGGACGGCCGGCGCAAGGTGGACTACATCCTGGTGTACCATCAC
 AAGAGGCCCTCGGGCAACCGGACCTGGTCAAGGGTGCAGCACAGCGACACCCCTCTGGGGCTCGCA
 GCGTCAAGCAGGACCACCCCTGCCGGCAAGGGGGCTCGTGGATGCAGGCTCGGGGAGCCCCGAT
 GGACTACCACGAGGATGACAAGCGCTTCCGCAGGGAGGAGTACGAGGGCAACCTCTGGAGGCGGGCTG
 GAGCTGGAGCGGGACGAGGACACTAAAATCCACGGAGTCGGGTTTGTGAAAATCCATGCCCTGGAACG
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 TGCTGTATAAGGATTCCTTTTTCGACAGCAAAACCCGGAGCACGATTGTCTATGAGATCTTGAAGAGAAC
 GACGTGTACAAAGGCCAAGTACAGCATGGGCATCACGAGCCTGCTGGCCAATGGTGTGTACGCGGCTGCA
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 AGTGGGCACGCTATGGAGTTTTCTATAAGTACCAGCCATCGACCTGGTCAAGGATATTTGGGGAGAA
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 ATTGTCTTCTGTACGGATGCCACCATGGATGAAAACATCCCCAGCATGGAGATGTGTGACCAGAGAC
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 GAGGAGCAAGACAAGCAGCAGCTGCTGGAACCTGGATGGAGAAGGAGCGGCAGAAGGACGAGCCCGCT
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 GGCGTCTCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213098 representing NM_018043
 Red=Cloning site Green=Tags(s)

MRVNEKYSTLPAEDRSVHIINICAIEDIGYLPSEGTLLNSLSVDPDAECKYGLYFRDGRRKVDYILVYHH
 KRPSGNRTL VRRVQHS DTPSGARSVKQDHPLPGKGASLDAGSGEPPMDYHEDDKRFRREEYEGNLL EAGL
 ELERDEDTKIHG VGFVKI HAPWNVLCREAEFLKLMPTKKMYHINETRGLLKKINSVLQKITDPIQPKVA
 EHRPQTMKRLSYPF SREKQHLFDLSDKDSFFDSKTRSTIVYEILKRTTCTKAKYSMGITSLLANGVYAAA
 YPLHDGDYNGENVEFNDRKLLYEEWARYGVFYKYQPIDLVRKYFGEKIGLYFAWLGVYTQMLIPASIVGI
 IVFLYGCATMDENIPSMEMCDQRHNITMCPLCDKTCSYWKMSACATARASHLFDNPATVFFSVFMALWA
 ATFMEHWKRKQMR LN YRWDLTGFE EEEEEAVKDHPRAEYEARVLEKSLKKESRNKETDKVKLTWRDRFPAY
 LTNLVSIIFMIAVTF AIVLGVIIYRISMAAALAMNSSPSVRSNIRVTVTATAVIINLVIIILLDEVYGC I
 ARWLTKIEVPKTEKSFEERLIFKAFLLKFVNSYTPIFVVAFFKGRFVGRPGDYVYIFRSFRMEECAPGGC
 LMELCIQLSIIMLGKQLIQNNLFEIGIPKMKK LIRYLK LKQQSPDPHEECV KRKQRYEVDYNLEPFAGLT
 PEYMEMI IQFGFVTLFVASFPLAPL FALLN NIIIEIRLDAKKFVTELR RPVAVRAKDIGI WYNILRGIKGL
 AVIINAFVISFTSDFIPRLVYLYMYSKNGTMHGFVNHTLSSFNVSDFQNGTAPNDPLDLGYEVQICRYKD
 YREPPWSENKYDISKDFWAVLAARLAFVIVFQNLVMFMSDFVDWVIPDIPKDISQQIHKEKVL MVELFMR
 EEQDKQQLLETWMEKERQKDEPPCNHHNTKACPD SLGSPAPSHAYHGGVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

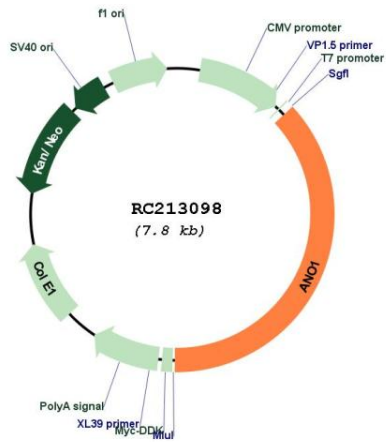


ACCN: NM_018043

ORF Size: 2880 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:	<ol style="list-style-type: none"> 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_018043.4 , NP_060513.4
RefSeq Size:	4811 bp
RefSeq ORF:	2961 bp
Locus ID:	55107
UniProt ID:	Q5XXA6
Cytogenetics:	11q13.3
Domains:	DUF590
Protein Families:	Transmembrane
MW:	111 kDa
Gene Summary:	Calcium-activated chloride channel (CaCC) which plays a role in transepithelial anion transport and smooth muscle contraction. Required for the normal functioning of the interstitial cells of Cajal (ICCs) which generate electrical pacemaker activity in gastrointestinal smooth muscles. Acts as a major contributor to basal and stimulated chloride conductance in airway epithelial cells and plays an important role in tracheal cartilage development. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC213098