

## Product datasheet for **SC316851**

### **TMEM16A (ANO1) (NM\_018043) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	TMEM16A (ANO1) (NM_018043) Human Untagged Clone
Tag:	Tag Free
Symbol:	TMEM16A
Synonyms:	DOG1; ORAOV2; TAOS2; TMEM16A
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_018043 edited  
 ATGGACTACCACGAGGATGACAAGCGCTTCCGCAGGGAGGAGTACGAGGGCAACCTCCTG  
 GAGGCGGGCTGGAGCTGGAGCGGGACGAGGACACTAAAATCCACGGAGTCGGGTTTGTG  
 AAAATCCATGCCCTGGAACGTGTGTGCAGAGAGGCCGAGTTTCTGAAACTGAAGATG  
 CCGACGAAGAAGATGTACCACATTAATGAGACCCGTGGCTCCTGAAAAAATCAACTCT  
 GTGCTCCAGAAAATCACAGATCCCATCCAGCCAAAAGTGGCTGAGCACAGGCCCCAGACC  
 ATGAAGAGACTCTCCTATCCCTTCTCCCGGGAGAAGCAGCATCTATTTGACTTGTCTGAT  
 AAGGATTCCTTTTTCGACAGCAAAAACCCGGAGCAGATTGTCTATGAGATCTTGAAGAGA  
 ACGACGTGTACAAAGGCCAAGTACAGCATGGGCATCACGAGCCTGCTGGCCAATGGTGTG  
 TACGCGGCTGCATACCCACTGCACGATGGAGACTACAACGGTGAAAACGTCGAGTTCAAC  
 GACAGAAAACCTGTACGAAGAGTGGGCACGCTATGGAGTTTTCTATAAGTACCAGCCC  
 ATCGACCTGGTCAGGAAGTATTTTGGGGAGAAGATCGCCTGTACTTCGCCTGGCTGGGC  
 GTGTACACCCAGATGCTCATCCCTGCCTCCATCGTGGGAATCATTGTCTTCTGTACGGA  
 TCGCCACCATGGATGAAAACATCCCAGCATGGAGATGTGTACCAGAGACACAATATC  
 ACCATGTGCCCGCTTTGCGACAAGACCTGCAGCTACTGGAAGATGAGCTCAGCCTGCGCC  
 ACGGCCCGCGCCAGCCACCTCTTCGACAACCCCGCCACGGTCTTCTTCTGTCTTCATG  
 GCCCTCTGGGCTGCCACCTTCATGGAGCACTGGAAGCGGAAACAGATGCGACTCAACTAC  
 CGCTGGGACCTCACGGGCTTTGAAGAGGAAGAGGAGGCTGTCAAGGATCATCCTAGAGCT  
 GAATACGAAGCCAGAGTCTTGGAGAAGTCTCTGAAGAAAGAGTCCAGAAAACAAAGAGACT  
 GACAAAGTGAAGTGCATGGAGAGATCGGTTCCAGCCTACCTCACTAACTTGGTCTCC  
 ATCATCTTCATGATTGCAGTGACGTTTGGCCATCGTCTCGGCGTCATCATCTACAGGATC  
 TCCATGGCCCGCCCTTTGGCCATGAACTCCTCCCCTCCGTGCGGTCCAACATCCGGGTC  
 ACAGTACAGCCACCGCAGTGCATCAACCTAGTGGTCATCATCCTCCTGGACGAGGTG  
 TATGGCTGCATAGCCCGATGGCTCACCAAGATCGAGGTCCCAAAGACGGAGAAAAGCTTT  
 GAGGAGAGGCTGATCTTCAAGGCTTTCCTGCTGAAGTTTGTGAATTCCTACACCCCATC  
 TTTTACGTGGCGTTCTTCAAAGGCCGTTTGTGGACGCCGGGCGACTACGTGTACATT  
 TTCCGTTCTTCCGAATGGAAGAGTGTGCGCCAGGGGGCTGCCTGATGGAGCTATGCATC  
 CAGCTCAGCATCATGCTGGGAAACAGCTGATCCAGAACAACCTGTTGAGATCGGC  
 ATCCCGAAGATGAAGAAGCTCATCCGCTACCTGAAGCTGAAGCAGCAGAGCCCCCTGAC  
 CACGAGGAGTGTGTGAAGAGGAAACAGCGGTACGAGGTGGATTACAACCTGGAGCCCTT  
 GCGGGCCTCACCCAGAGTACATGGAATGATCATCCAGTTTGGCTTCGTCACCCTGTTT  
 GTCGCCTCCTTCCCCTGGCCCCACTGTTGCGCTGCTGAACAACATCATCGAGATCCGC  
 CTGGACGCCAAAAAGTTTGTCACTGAGCTCCGAAGGCCGGTAGCTGTGAGAGCCAAAGAC  
 ATCGGAATCTGGTACAATATCCTCAGAGGCATTGGGAAGCTTGTGTGCATCATCAATGCC  
 TTCTGATCTCCTTACGTCTGACTTCATCCCAGCCTGGTGTACCTCTACATGTACAGT  
 AAGAACGGGACCATGCACGGCTTCGTCAACCACACCTCTCCTCCTTCAACGTCAGTGAC  
 TTCCAGAACGGCACGGCCCCAATGACCCCTGGACCTGGGCTACGAGGTGCAGATCTGC  
 AGGTATAAAGACTACCGAGAGCCCGTGGTCGAAAACAAGTACGACATCTCCAAGGAC  
 TTCTGGCCGCTCTGGCAGCCCGCTGGGTTTGTGCATCGTCTTCCAGAACCTGGTCTATG  
 TTCATGAGCGACTTTGTGACTGGGTATCCCGGACATCCCAAGGACATCAGCCAGCAG  
 ATCCACAAGGAGAAGGTGCTCATGGTGGAGCTGTTTCATGCGGGAGGAGCAAGACAAGCAG  
 CAGCTGTGAAAACCTGGATGGAGAAGGAGCGGCAGAAGGACGAGCCCGCTGCAACCAC  
 CACAACACCAAAGCCTGCCAGACAGCCTCGGCAGCCAGCCCCAGCCATGCCTACCAC  
 GGGGGCGTCTGTAG

**Restriction Sites:** Please inquire  
**ACCN:** NM\_018043  
**Insert Size:** 5200 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](mailto: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:** It is not a variant.

**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\\_018043.4](#), [NP\\_060513.4](#)

**RefSeq Size:** 4811 bp

**RefSeq ORF:** 2883 bp

**Locus ID:** 55107

**UniProt ID:** [Q5XXA6](#)

**Cytogenetics:** 11q13.3

**Domains:** DUF590

**Protein Families:** Transmembrane

**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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the functional protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The extent of this transcript is supported by transcript alignments.