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Product datasheet for RC229400

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)

ORF Nucleotide Sequence:

>RC229400 representing NM_018043
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGGTCAACGAGAAGTACTCGACGCTCCCGGCCGAGGACCGCAGCGTCCACATCATCAACATCTGCG
CCATCGAGGACATCGGCTACCTGCCGTCCGAGGGCACGCTGCTGAACTCCTTATCTGTGGACCCTGATGC
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AGGGTTAAGACAGCCATGGCGGGGGTGAAATTGACTGACAAAGTGAAGCTGACATGGAGAGATCGGTTCC
CAGCCTACCTCACTAACTTGGTCTCCATCATCTTCATGATTGCAGTGACGTTTGCCATCGTCCTCGGCGT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC229400 representing NM_018043
Red=Cloning site Green=Tags(s)

MRVNEKYSTLPAEDRSVHIINICAIEDIGYLPSEGTLLNSLSVDPDAECKYGLYFRDGRRKVDYILVYHH
KRPSGNRTLVRRVQHSDTPSGARSVKQDHPLPGKGASLDAGSGEPPMDYHEDDKRFRREEYEGNLLEAGL
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VIPDIPKDISQQIHKEKVLMVELFMREEQDKQQLLETWMEKERQKDEPPCNHHNTKACPDSLGSPAPSHA
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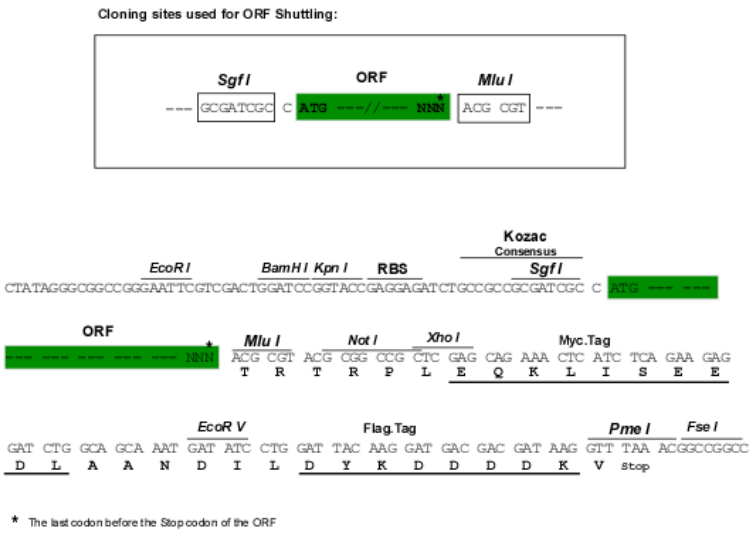
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018043

ORF Size: 2958 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).

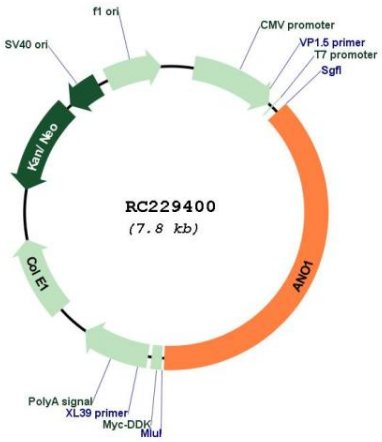
Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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_018043.6

RefSeq ORF:	2961 bp
Locus ID:	55107
UniProt ID:	Q5XXA6
Cytogenetics:	11q13.3
Domains:	DUF590
Protein Families:	Transmembrane
MW:	113.9 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 RC229400