

## Product datasheet for **SC305338**

### Anoctamin 3 (ANO3) (NM\_031418) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Anoctamin 3 (ANO3) (NM_031418) Human Untagged Clone
Tag:	Tag Free
Symbol:	Anoctamin 3
Synonyms:	C11orf25; DYT23; DYT24; GENX-3947; TMEM16C
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

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>OriGene ORF sequence for NM_031418 edited
ATGGTCCACCATT CAGGCTCCATT CAGTCCTTTAAACAGCAAAAAGGTATGAATATAAGC
AAGAGTGAGATAACAAAAGAACTTCGTTAAAACCGTCTCGGAGATCCCTGCCTTGCCCTC
GCCAGAGCTACGCTTACTCAAAGAGCTTGAGCCAGTCTACTTCCCTCTTCCAGTCAACC
GAGAGTGAATCTCAGGCTCCCACATCTATAACCTTAATCTCCACTGACAAAGCAGAGCAA
GTTAATACTGAGGAGAATAAAAACGACTCTGTGCTGAGATGTTTCATTTGCTGACCTCAGC
GATTTTTGTTGGCCCTAGGAAAAGATAAGGATTACACGGATGAATCAGAACACGCTACT
TATGACCGATCTCGTCTCATTAACTGACTTTGTTATCAAAGATAAATCTGAATTCAGACA
AAATTATCTAAGAATGACATGAATTACATAGCATCCAGTGGACCTCTGTTCAAAGATGGC
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GCAAGCCCGGATATCATGTTTATTAATAATTCACATTCATGGGACACGCTGTGCAAGTAT
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AACCCAATGGTTCTTGACAAGTCAGCTTTTCCAGACCTAGAGGAGTCAGACTGCTATACT
GGCCCTTCAGCCGTGCACGGATTACCACTTCATAATAAATAATAAAGACACCTTCTTC
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GGAATATCAAAAGTGGGTATCCGTAACCTTATAAAACAATGGCTCATAATAGCAGCGTTT
CCACCACATGAGGGAGCCTACAAAAGTAGCCAGCCATTAAAACCATGGACCTCAGAAT
AACAGACATCTATTATATGAGCGCTGGGCACGCTGGGGAATGGGTATAAGCATCAGCCT
CTGGATTAATCAGGCTGTACTTTGGTGAGAAGATTGGACTATACTTTGCTTGGCTGGGA
TGTATACTGGAATGTTGATTCTGCAGCAATTGTTGGTTTGTGCGTTTTCTTCTATGGA
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ATGTGCCCTCTCTGTGACAAGAACTGCTCCCTGCAGAGACTCAACGACAGCTGTATCTAT
GCCAAGGTGACATATTTGTTGATAAATGGAGGGACAGTCTTCTTTGCTATTTTTATGGCA
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GTGATCACTGCAGTGTGGAGTTGGGTGTACCGCCTGGTTGTCATGGAACAGTTTGCA
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TGTATCAATTTCAATAATCATTATGTTGCTGAATCTTGCTTATGAAAAAATGCTTACCTC
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ATGTTCTCTTCCAGTTTGTCAATTTAAACAGTTCATCTTCTATATCGCTTTCTTTTTG
GGAAGATTTGTAGGCCACCCAGGAAAAACAATAAACTTTTTGACCGTGGGAGACTGGAG
GAATGTCATCCTAGTGGCTGTTGATAGACCTCTGCCTCCAGATGGGTGTCATCATGTTT
TTGAAGCAAATATGGAACAACCTCATGGAACCTAGGATACCCGTTGATCCAGAACCTGGTG
TCACGACATAAAATCAAGCGGGGAATACATGATGCTTCCATACCTCAGTGGGAAAATGAT
TGAATCTGCAGCCCATGAACCTTCATGGACTGATGGATGAGTACTTAGAAATGGTTTTG
CAATTTGGTTTTACCACCATCTTTGTTGCGGCTTTTCTCTAGCCCTCTTTTGGCTTTG
TTAAACAATATCATTGAAATCAGGCTGGATGCATACAAATTTGCTACTCAATGGCGGAGG
CCTTTGCCAGCCGAGCAACTGACATAGGTATCTGGCTTGAATTTCTCGAAGGAATCGGT
ATATTGGCTGTGATCACCAATGCATTTGTAATTGCTATTACTTCTGATTACATCCCACGT
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GAGTTTACTTTACAATACTGGCATACTTGTGCTGCTAGATTGGCCTTCATTATTGTGTTT
GAGCACCTGTTTTTGGGATTAAGTCATTCATCGCATACCTGATTCCAGACGTACCAAAG
GGTCTACATGACCGAATACGACGAGAGAAGTACTTAGTTCAAGAAATGATGTATGAGGCT
GAACTGGAACATTTGCAACAACAACGGAGAAAAAGTGGTCAGCCTGTTACCATGAATGG
CCTTAG
    
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<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_031418
<b>Insert Size:</b>	3100 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This clone has been fully sequenced and found three SNPs within the protein associated with this reference, NM_031418.1. No amino acid change was found.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_031418.1</a></u> , <u><a href="#">NP_113606.1</a></u>
<b>RefSeq Size:</b>	6641 bp
<b>RefSeq ORF:</b>	2946 bp
<b>Locus ID:</b>	63982
<b>UniProt ID:</b>	<u><a href="#">Q9BYT9</a></u>
<b>Cytogenetics:</b>	11p14.3-p14.2
<b>Protein Families:</b>	Transmembrane

**Gene Summary:**

The protein encoded by this gene belongs to the TMEM16 family of predicted membrane proteins, that are also known as anoctamins. While little is known about the function of this gene, mutations in this gene have been associated with some cases of autosomal dominant craniocervical dystonia. Cells from individuals with a mutation in this gene exhibited abnormalities in endoplasmic reticulum-dependent calcium signaling. Studies in rat show that the rat ortholog of this protein interacts with, and modulates the activity of a sodium-activated potassium channel. Deletion of this gene caused increased pain sensitivity in the rat model system. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2015]

Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, contains an alternate 5' terminal exon, and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) has a distinct N-terminus and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.