

## Product datasheet for **MG223701**

### Ano3 (NM\_001128103) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ano3 (NM_001128103) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ano3
Synonyms:	A1838058; B230324K02Rik; Tmem16c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG223701 representing NM\_001128103  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTCCACCCTCAGGCTCCATTCAGTCTTTAAACAGCAAAAAGGTATGAATATAAGCAAAAGTGAGA  
 TAACAACTGAAGCGTCATTAACCACATCTAGGAGATCCCTGCCTTGCCTGGCCAGAGCTATGCTCATT  
 AAAAAGCTTGAGTCAATCTGCTTCACTGTTTCACTCAACTGAGAGTGAATCTCAGGCTCCAACCTTCTGTA  
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 GTTCTTTGCTGACCTCAGTACTTTTCTGGCTCTGGGAAAGACAAGGATTACCTGGATGAATCTGA  
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 AAGCTGTCTAAGAATGACATGAGTTACATAGCATCTAGTGGACTCTTATCAAAGATGGCAAAAAGCGAA  
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 CACATTCATGGGACACACTGTGCAAGTATGCAGAGAGGCTGAACATCAGGGTGCCTTTCAGGAAGAAAT  
 GTTACTATACTGACCAGAAGAACAATCAAGAGCAGGGTACAAAACCTATTTCAAAGAATCAAAAAATG  
 GATGTCCCAAAACCAATGGTCTTGACAAGTCAGCGTTTCCAGAGCTGGAGGAGTCGGACTGCTATACT  
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 CCGTAAGCTTATCACTAATGGTTCATACATAGCAGCATTTCCCCACATGAGGGAGCCTACAAGAGTAGC  
 CTTCCGATCAAACCCATGGACCTCAGAATAACAGGCATCTGTTGTATGAGCGCTGGGCACGCTGGGGAA  
 TGTGTTACAAGCATCAGCCTTGACTTAATCAGGATGTACTTTGGTGAAGATTGGCTTACTTCGCTCGC  
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 TCAGCCTTCATCCGACAAAGTCACGCGACTTCTGTGTCTGTCTCAGGAATCTTCTCATGATCTCCTTG  
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 ATGTCAACAATAGCTTATCCTTCTTTGACCTGAGTGAACCTTGGTATGGGAAAATCTGGTACTGCAGGTA  
 CCGAGACTATAGAGGCCACCTTGGAGTTCCAACCCTATGAATCACCTTACAGTACTGGCACATCCTG  
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 TGATTCCTGATATACAAAGGGCTCCGTGAGCGCATACGCGAGAGAAAATCTTGGTCCAGGAAATGAT  
 GTATGAGGCTGAACTGGAACATTTACAACAACAGAGAAGAAAAAGTGGTCAGCCTATTACCATGAATGG  
 CCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG223701 representing NM\_001128103  
 Red=Cloning site Green=Tags(s)

MVHHSGSIQSFQKQKGMNISKSEITTEASLKPSRRSLPCLAQSYAHSKSLSQSASLFQSTESSESQAPTSV  
 TFLSADKPEHVTSEESRKDSTLKCSFADLSDFCLALGKDKDYLDESEHANYDRSRLNDFVTKDKPASKT  
 KLSKNDMSYIASSGLLFKDGKKRIDYILVYRKTNIQYDKRNTFEKNLRAEGLMLEKEPAIANPDIMFIKI  
 HIPWDTLCKYAERLNIRVFPFRKKCYTQKKNKSKSRVQNYFKRIKKWMSQNPMLDKSAFPELEESDCYT  
 GPF SRAR IHHF I I NNKDTFF SNATRSRIVYHMLERTKYENGI SKVGIRKLITNGSYIAAFPHEGAYKSS  
 LP I KTHGPQNNRHLL YERWARWGMWYKHQPLDLIRMYFGEKIGLYFAWLGWYTGMLIPA AVVGLCVFFYG  
 LVTMNSQVSQEICKATEVFMCP L CDKNCSLQRLNDSCIYAKVTYLF DNGGT VFFAIFMAIWATVLEFW  
 KR RRSILTYTWDL IEWEEEEETLRPQFEAKYYRMEVINPITGKPEHPQSSDKVTRLLVSVSGIFFMISL  
 VITAVFAVVVYRLVVMEQFASFKNFVKQHWQFATSGAAVCINFIIIMLLNLAYEKIAYLLTNLEYP RTE  
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 AFPLAPLLALLNNIIEIRLDAYKFVTQWRRPLPARATDIGIWLGILEGIGILAVITNAFVIAITSDYIPR  
 FVYEYKYGPCANHVKQENCLKGYVNSLSF FDLSELGMGKSGYCRYRDRYRPPWSSKPYEFTLQYWHIL  
 AARLAFIIVFEHLVFGIKSFIAYLIPDIPKGLRERIRREKYL VQEMMYEAELEHLQQRRKSGQPIHHEW  
 P

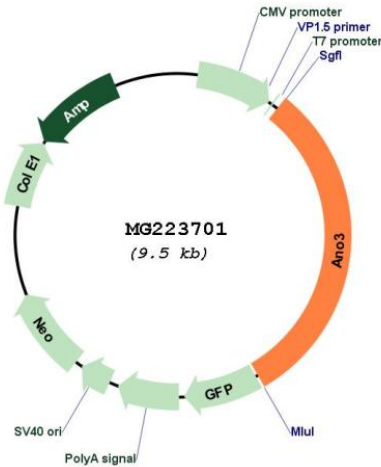
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001128103

**ORF Size:** 2943 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.

**RefSeq:** [NM\\_001128103.2](#), [NP\\_001121575.1](#)

**RefSeq Size:** 2946 bp

**RefSeq ORF:** 2946 bp

**Locus ID:** 228432

**UniProt ID:** [A2AHL1](#)

**Cytogenetics:** 2

**Gene Summary:**

Has calcium-dependent phospholipid scramblase activity; scrambles phosphatidylcholine and galactosylceramide (PubMed:23532839). Does not exhibit calcium-activated chloride channel (CaCC) activity (PubMed:23532839). Seems to act as potassium channel regulator and may inhibit pain signaling; can facilitate KCNT1/Slack channel activity by promoting its full single-channel conductance at very low sodium concentrations and by increasing its sodium sensitivity (PubMed:23872594).[UniProtKB/Swiss-Prot Function]