

## Product datasheet for **MG212067**

### Tiam2 (NM\_011878) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tiam2 (NM_011878) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tiam2
Synonyms:	3000002F19Rik; mKIAA2016; STEF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG212067 representing NM_011878 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGAACCTCCGAGAGTCAATATACCTTCCAAGGATCCAAGAATCATAGTAATACTGTCCTGCTGCTA  
AGCAAAAGCCTTGCTCTCTGAAAATACGCAGCGTTCATGCAAAAGACGAGAAGTCCTTACATGGTTGGAC  
TCATGGGAGCAGCGGTGCAGGCTACAAGTCCAGGTCCTAGCCCCAAGCTGCCTTTCTCACTTTAAGAAT  
CACCAGCCTTACGCCACCAGACTCAGTGGACCCACATGTAAGTCTCAAAGGGCACCACCTACTCTAAGC  
ACAGAGCAAATACCCCGGAAATGATTTCCAGGGCAACAGTGGTCTTTCTTACCTGAGAATGGCTTCCA  
CTATGTTGACCGGAGTCAAGAGAAAGCCATATCACCTCCAATGGGCACCTTCTCACCTGCATGGGAGA  
AAGGAAAGCCTCGCTCCACTCCTCCAGGCGAGGACCACAGGAGCCCCAGGGTGCTCATCAAGACCTGG  
GAAAGCTAGACGGGTGTTAAGAGTCGAGTTCCACAACGGTGGCAACCCCCACAAGGGGACCTCCGAGGA  
CCCCAGTGGACCTGTACGGCTGCTGAGATACTCCCTACCTTAGCATCGGAAACCTGCCCGGTGCGGGAA  
ACCAGGCGGATTCGCTGCAGGCTCCCATCCAGCCAGCGGCCCTCTCCCACTGACTCTCGCTGCGCT  
CCAGCAAAGGCAGCTCCCTGAGCTCAGAGTCATCCTGGTATGACTCCCCCTGGGGCAACGCTGGGGAGGT  
GAGCGAGGTGGAGGGCTCCTTCTGGCTCCAGCACTCCAGACCCAGCCTCCCCAGCAGCTTCCCACCC  
AGTGACACCAAAAAGCCTTTCAACCAAAGCTCTCCCTCTCCTCCGGAATTGTACAAGATCCCA  
ACCTGGGGTGCCGCTCACCTCCGGCACCTGCCTTTCTTCCAATGAGTACATCAGCTCTCAAGTCAGCCT  
GAACAACCGAGTCTCCTTTGCGTCTGACATGGATGTGCCCTCCAGGGTGGATCACAGGGATCCCCTGCAC  
TATAGTTCCTTTACTCTCCCTGTGCAAGTCCAAAGCCTTAACTGAAGATGCAGCTAAGAAAGACACCC  
TCAAAGCCAGAATGCGGCGCTTTCAGTACTGGACAGGAAGCCTCTCCAGGAAGAAGAGGAAACTGCAGGA  
ACCCAGGTCCATGGAGGGCAGTACTTTGATAGCCACTCAGATGGACTGAATGCAGAAGGGCAGGTG  
CCCGCGCAGACATCTTCTTACTGTGGTCAGGGGGCTCGGCTCAGACCCTGCCTCACAGAAGCGAATCCA  
CTCAGCTATCAGCGTCGATCCCCTCCGACAGAACATCTATGAGAATTCATGCGAGAGCTCGAAATGAG  
CAGGAGCAACACAGAACAGTGGAACTCCACAGAGACCATGGAGTCCAGCAGCGAGTCTGTCAGTCTCA



[View online »](#)

CTGGAGCAGCTGGATCTGCTCTTTGAGAAGGAGCAGGGAGTGGTCCGAAAGCCGGTGGCTCTTCTTCA  
AACCCCTTGTACCTTGCAGAAGGAGAGGAAACTGGAGCTGGTGGCTCGGAGGAAGTGGAAACAATACTG  
GGTGACCTGAAAGGCTGTACTCTGCTGTTTTATGAGACCTATGGAAAGAATTCCACAGAGCAGAATAGT  
GCCCCACGGTGTGCCCTTTTGCAGAGGACAGCATCGTGCAGTCTGTCCCAGAGCATCCCAAGAAGGAAC  
ACGTGTTCTGCCTGAGTAACTCCTGTGGGACGTCTACCTATCCAGGCCACTAGCCAGACAGATCTGGA  
AAACTGGGTACAGCCATCCACTCGCGTGCATCCCTCTTTGCAAAGAAGCACGAAAGGAGGACACG  
GTGCGACTGCTAAAGAGCCAGACCAGAAGCCTGCTTCAGAAGTAGACATGGATGCAAGATGAAGAAGA  
TGGCAGAGTTGCAGTGTCTGTGGTGGCGACCCCAAGAACAGGAAGGCCATCGAGAATCAGATCCGGCA  
ATGGGAGCAGAATCTGGAATAATCCACATGGACCTGTTCCGCATGCGCTGCTATTTGGCGAGCTTACAA  
GGTGGGAGTTACCAAATCCCAAGAGTCTCCTTGTGCCACCAGCCGCCCTCCAAGCTGGCTCTTGCCA  
GGCTGGGCGTCTGTCTGTTTCGTCTTTCCATGCTCTGGTGTGTTCCAGAGATGATTCCACTCTCAGGAA  
AAGAACAATTTCCCTTACCCAGAGAGGAAAAAGCAAGAAAGGCATATTTTCTTATTGAAAGGTCTGGAC  
ACCCTAGCAAGAAAGGTAGGGAGAAGAGAGCTCCATAACTCAGATGTTTGATTCTAGCCACAGCCATG  
GATTTCTTGAACTCAGTACCTCAAAGTCCACTAACTCAACAAGGCCATGACCTGCATCTGTATGG  
CTCCGCAGTAGACAGCGCTGCGAGACAGCATGTGGAAAGTCCAGACTTATGTCCACTCCAGGATAAC  
GAAGGAGTTACTGTGACCATCAAGCCAGAGCACAGGGTGGAAAGTGTCTGGCTTTGGTGTGCAAGATGA  
GACAGTTGGAACCCACTCACTATGGTCTTCAGCTCCGAAAGGTGGTTCGATAAAAGTGTGGAGTGGTGTG  
GCCCGCGTGTATGAATACATGCAAGAGCAGGTTTATGATGAAATCGAAGTTTTCCCACTCAGTGTGAT  
GACGTGCAGCTAACCAAGACTGGGGACATGACTGACTTTGGGTTTGCAGTACAGTTCAGGTGGACGAAC  
ACCAGCATCTCAACCGGATATTTATCAGTGATGTTCTCCCTGACAGCCTGGCATAACGAGGAGGGCTGAG  
AAAGGGCAACGAAATCACAAGCTTAAATGGGGAACCAAGTGTCTGACCTTGACATCCAGCAGATGGAGGCT  
TTGTTTTCTGAGAAGAGCGTTGGCCTCACTCTAGTCGCCCCGCTGTGACCACAAGACCAACCCCTGTGTG  
CTTCCCTGGTCAGACAGTACCTGTTCTCCAGGGACCAGAAAAGTCTGCCGCCCTCCCAACCCATCCCA  
GCTGCTGGAGGAATTCCTGGATAACTTTAGAAAAACCGCCACAGTGTATTCAGCAATGTCCTGAGATC  
ACAAGTGGCTTGAAGAGGAGCCAGACAGAAAGCCCTGGATCAAGTGCCCCACAGGGAAGATGGAGC  
AGACATTCCTGAGCGCTGACCAGATTGCGGAGCTCTGCAGGGACTTGAACAACACCCACACCAACAGTAT  
GGAAGCACCAACAGAGAGCCATGACCCACCTCCAGGCCCTGGCTCGTACCTCTCAGATGCAGATCGC  
CTCCGAAAGTCACTCAGGAGCTGTAGACACAGAGAAGTCTTACGTGAAGGATCTGAGCTGCCTCTTTG  
AACTATACTTGGAGCCACTTCAGAATGAGACCTTTCTTACCCAAGATGAGATGGAGTCACTTTTTGGGAG  
CCTGCCAGAGATGCTGGAGTTTCAAAGGTGTTCTGGAGACGTTGGAGGATGCGATCTCCGCTTCTCTCG  
GACTTTAGTGTCTGAAACCCCTCACAGTTTCGAAAATGCTGTTCTCCCTTGGAGGTTCTTTCTCTCT  
ACTATGCCGATCACTTTAAGCTATACAGTGGGTTCTGTGCAACCACATTAAGTACAGAGGGTTCTAGA  
GCGAGCTAAAACGGACAAGGCCTTCAAGGCTTTTCTGGATGCCCGAAATCCCAACAGCAGCACTCTCC  
ACGCTGGAGTCTATCTCATCAAGCCTGTTTCAAGAGTGTCTCAAGTATCCTCTGCTTCTCAAGGAGCTAG  
TGTCACTGACTGACCATGAGAGTGAAGAACAATCACCTGACAGAAGCACTAAAGGCCATGGAAAAAGT  
CGCCAGTACATCAATGAGATGCAGAAGATCTACGAGGATTACGGGATGGTGTGTTGACCAGCTGGTGGCA  
GAGCAGAGTGGCAGAGAAGGAAGTGCAGAGCTGTCCATGGGGAACTTCTGATGCACTCTACAGTTT  
CCTGGTTGAATCCGTTCTGTCTTAGGAAAAGCCAGGAAGGACATTGAGCTCACAGTATTTGTTTTTAA  
GAGAGTGTCACTGGTTTATAAAGAAAAGTCAAGCTGAAAAGAAAAGTGCCTCGAATCCCGCCT  
GCTCACAACCTGCTGACTTGGATCCATTTAAATTCGCTGGTTGATTCCCATATCTGCGCTTCAAGTTA  
GACTGGGGAACACGGCAGGGACTGAAAATAATTCACGTGGGAGCTGATTATACCAAGTCGAAAATTTGA  
AGGACGGCCAGAAACCATCTTTCAACTGTGCTGCAAGTGCAGAGCAGAGAACAAAACAGCATTGTTAAGGTG  
ATTCGTTCTATTCTGAGAGAGAATTCGGCGCCACATAAAGTGTGAGCTGCCACTGGAGAAGACGTGTA  
AGGACCGCTAGTACCTTTAAGAACCAGTTCCTGTTTCAGCCAAATAGCCTCGTCCAGGTGTTGAA  
GGGCTCAGAATCCTCCAGCAGCGAGTGGCCAGCGAGCCAGCAAGGGCAACTCACTGGACTCAGAT  
GAGTGCAGCTGAGCAGTGGCACCCAGAGTACGGCTGCCCGTAGCCGAGAGCAGGCGAGACTCTAAGA  
GCACCGAGCTGGAGAAAGACGCTCAGGAGGGCCTGGCGGAGTTTCCAGATGGTCTTATCAAGAAAGCGA  
CATTCTGAGTGTGAAGATGAGGACTTCCACCACCTCTGAAACAGGGTAGCCCTACTAAGGACATTGAG  
ATTCAGTTCCAGAGACTGAAAATCTCTGAGGAATCCGACGTGCACCCAGTTGGGACGAGCCTCTCACAG  
AGTCAGGTGAACAGCCAAAGCTGGTCAGGGGCCATTTTGGCCCAATTAACGGAAAGCAACAGCACAA  
GAGGGGCAGAGGAATTTGCTCAAGGCGCAGACTCGTACCAGTCCCTGGACAGCCACCCAGAAACTGCC  
AGCATTGATCTAAACTTGGTCTGGAGAGAGAATTCAGTGTCCAGAGCTTAACTTCACTGCTCAATGAGG

AGGGTTTTTATGAAACACAGAGCCATGGCAAATCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG212067 representing NM\_011878

Red=Cloning site Green=Tags(s)

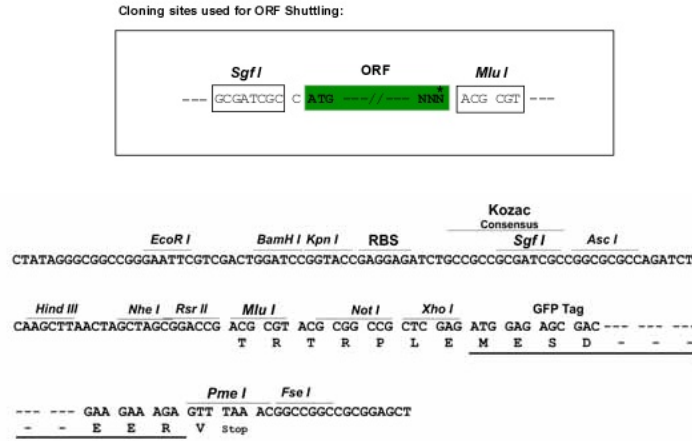
MGNSESYTFQGSKNHSNTVTGAKQKPCSLKIRSVHAKDEKSLHGWHGSSGAGYKSRSLARSCLSHFKN  
 HQPYATRLSGPTCKVSKGTTYSKHRANTPGNDFQNSGAFLENGFHYVDRESEESHITSNHLLTCYGR  
 KESLASTPPGEDHRSPRVLIKTLGKLDGCLRVFHNNGNPHKGTSEDPSPVRLRLRYSPTLASETCPVRE  
 TRRHSAAAGSPSSQRPSPDTSRLRSSKSSLSSESSWYDSPWGNAGEVSEVEGSFLAPSTPDPSPSSFPF  
 SDTKKPFNQSSLSLRELKDPNLGCRSPSGTCLSSNEYISSQVSLNRRVASFADMDVPSRVDRHDPH  
 YSFTLPCRKSKALTEDAAKDTLKARMRRFSDWTGSLSRKKRKLQEPRSMEGSEYFDSHSDGLNAEQV  
 PAQTSSLLWSSGSAQTLPHRSESTHAISVDPLRQNIYENFMRELEMSRSNTEHVETSTETMESSSES  
 LEQLDLLFEKEQGVVRKAGWLFKPLVTLQKERKLELVARRKWKQYVWTLKGCTLLFYETYGKNSTEQNS  
 APRCALFAEDSIVQSVPEHPKKEHVFLSNSCGDVYLFQATSQTDLNWWTAIHSACASLFAKKHGKEDT  
 VRLKSKQTRSLQKIDMDSKMKMAELQLSVVSDPKNRKAIENQIRQWEQNLEKFMHDLFRMRCYLASLQ  
 GGELPNPKSLLAATSRPSKLALGRLGVLVSSFHALLVCSRDDSTLRKRTLSTQRGKSKKGFSSSLKGLD  
 TLARKGREKRASITQMFDSHSHGFLGTLPQKSTNSNKAHDLHLVYSAVDSALRDSMWEVQTYVHFQDN  
 EGVTVTIKPEHRVEDLALVCKMRQLEPHYGLQLRKVVDKSVEWCVPALYEYMQEQVYDEIEVFPLSVY  
 DVQLTKTGDMDFGFVAVTVQVDEHQHLNRFISDVLPSLAYGGGLRKGNEITSLNGEPVSDLDIQQMEA  
 LFSEKSVGLTLVARPVTRRRLCASWSDSDLFSRDQKSLPPSPNQSQLLEEFLDNFRKTATSDFSNVPEI  
 TTGLKRSQTEGLDQVPHREKMEQTFLSADQIAELCRDLNNTHTNSMEAPTESHDPPRPLARHLSADR  
 LRKVIQELVDTEKSYVKDLSCFELYLEPLQNETFLTQDEMESLFGSLPEMLEFQKVLETLEDAISASS  
 DFSVLETPSQFRKLLFSLGGSFLYYADHFKLYSGFCANHIKVQVLERAKTDKAFKAFLDARNPTKQHS  
 TLESYLKIPVQRVLKYPLLLKELVSLTDHESEEYHLTEALKAMEKVASHINEMQKIYEDYGMVFDQLVA  
 EQSGTEKEVTELSMGELLMHSTVSWLNPFLSLGKARKDIELTVFVFKRAVILVYKENCCLKKLPNSRP  
 AHNSADLDPFKFRWLIPISALQVRLGNTAGTENNSTWELIHTKSEIEGRPETIFQLCCSDSENKTSIVKV  
 IRSILRENFRRIKCELPLEKTCKDRLVPLKNRVPVSAKLASSRSLKGLRTSSSSEWPSEPSKGNLSDSD  
 ECSLSSGTQSSGCPVAESRRDSKSTELKDAQEGLAEFPDGLIKESDILSDEDEDFHHPLKQGSPTKDIE  
 IQFQRLKISEESDVHPVQGPLTESGEQPKLVRGHFCPIKRKANSTKRGRGTLKLAQTRHQLSDSHPETA  
 SIDLNLVLEREFSVQSLTSVVNEEGFYETQSHGKS

TRTRPLE - GFP Tag - V

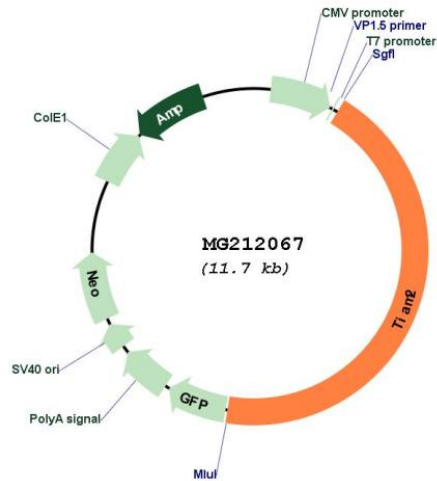
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_011878

ORF Size: 5145 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<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>	<p><a href="#">NM_011878.2</a>, <a href="#">NP_036008.2</a></p>
<b>RefSeq Size:</b>	<p>6128 bp</p>
<b>RefSeq ORF:</b>	<p>5148 bp</p>
<b>Locus ID:</b>	<p>24001</p>
<b>UniProt ID:</b>	<p><a href="#">Q6ZPF3</a></p>
<b>Cytogenetics:</b>	<p>17 1.99 cM</p>
<b>Gene Summary:</b>	<p>Modulates the activity of RHO-like proteins and connects extracellular signals to cytoskeletal activities. Acts as a GDP-dissociation stimulator protein that stimulates the GDP-GTP exchange activity of RHO-like GTPases and activates them. Activates specifically RAC1, but not CDC42 and RHOA. Mediates extracellular laminin signals to activate Rac1, contributing to neurite growth. Involved in lamellipodial formation and advancement of the growth cone of embryonic hippocampal neurons. Promotes migration of neurons in the cerebral cortex. When overexpressed, induces membrane ruffling accompanied by the accumulation of actin filaments along the altered plasma membrane.[UniProtKB/Swiss-Prot Function]</p>