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# Product datasheet for RC213556

## TIAM2 (NM_001010927) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | TIAM2 (NM_001010927) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | TIAM2 |
| **Synonyms:** | STEF; TIAM-2 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |



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**ORF Nucleotide Sequence:**

>RC213556 representing NM_001010927
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGGACCGCGGGAGAATCAGGATCCTCCTCCGAGGCCTCTGGCCCGCCACCTGTCTGATGCAGACC
GCCTCCGCAAAGTCATCCAGGAGCTTGTGGACACAGAGAAGTCCTACGTGAAGGATTTGAGCTGCCTCTT
TGAATTATACTTGGAGCCACTTCAGAATGAGACCTTTCTTACCCAAGATGAGATGGAGTCACTTTTTGGA
AGTTTGCCAGAGATGCTTGAGTTTCAGAAGGTGTTTCTGGAGACCCTGGAGGATGGGATTTCAGCATCAT
CTGACTTTAACACCCTAGAAACCCCCTCACAGTTTAGAAAATTACTGTTTTCCCTTGGAGGCTCTTTCCT
TTATTACGCGGACCACTTTAAACTGTACAGTGGATTCTGTGCTAACCATATCAAAGTACAGAAGGTTCTG
GAGCGAGCTAAAACTGACAAAGCCTTCAAGGCTTTTCTGGACGCCCGGAACCCCACCAAGCAGCATTCCT
CCACGCTGGAGTCCTACCTCATCAAGCCGGTTCAGAGAGTGCTCAAGTACCCGCTGCTGCTCAAGGAGCT
GGTGTCCCTGACGGACCAGGAGAGCGAGGAGCACTACCACCTGACGGAAGCACTAAAGGCAATGGAGAAA
GTAGCGAGCCACATCAATGAGATGCAGAAGATCTATGAGGATTATGGGACCGTGTTTGACCAGCTAGTAG
CTGAGCAGAGCGGAACAGAGAAGGAGGTAACAGAACTTTCGATGGGAGAGCTTCTGATGCACTCTACGGT
TTCCTGGTTGAATCCATTTCTGTCTCTAGGAAAAGCTAGAAAGGACCTTGAGCTCACAGTATTTGTTTTT
AAGAGAGCCGTCATACTGGTTTATAAAGAAAACTGCAAACTGAAAAAGAAATTGCCCTCGAATTCCCGGC
CTGCACACAACTCTACTGACTTGGACCCATTTAAATTCCGCTGGTTGATCCCCATCTCCGCGCTTCAAGT
CAGACTGGGGAATCCAGCAGGGACAGAAAATAATTCCATATGGGAACTGATCCATACGAAGTCAGAAATA
GAAGGACGGCCAGAAACCATCTTTCAGTTGTGTTGCAGTGACAGTGAAAGCAAAACCAACATTGTTAAGG
TGATTCGTTCTATTCTGAGGGAGAACTTCAGGCGTCACATAAAGTGTGAATTACCACTGGAGAAAACGTG
TAAGGATCGCCTGGTACCTCTTAAGAACCGAGTTCCTGTTTCGGCCAAATTAGCTTCATCCAGGTCTTTA
AAAGTCCTGAAGAATTCCTCCAGCAACGAGTGGACCGGTGAGACTGGCAAGGGAACCTTGCTGGACTCTG
ACGAGGGCAGCTTGAGCAGCGGCACCCAGAGCAGCGGCTGCCCCACGGCTGAGGGCAGGCAGGACTCCAA
GAGCACTTCTCCCGGGAAATACCCACACCCCGGCTTGGCAGATTTTGCCGACAATCTCATCAAAGAGAGT
GACATCCTGAGCGATGAAGATGATGACCACCGTCAGACTGTGAAGCAGGGCAGCCCTACTAAAGACATCG
AAATTCAGTTCCAGAGACTGAGGATTTCCGAGGACCCAGACGTTCACCCCGAGGCTGAGCAGCAGCCTGG
CCCGGAGTCGGGTGAGGGTCAGAAAGGAGGAGAGCAGCCCAAACTGGTCCGGGGGCACTTCTGCCCCATT
AAACGAAAAGCCAACAGCACCAAGAGGGACAGAGGAACTTTGCTCAAGGCGCAGATCCGTCACCAGTCCC
TTGACAGTCAGTCTGAAAATGCCACCATCGACCTAAATTCTGTTCTAGAGCGAGAATTCAGTGTCCAGAG
TTTAACATCTGTTGTCAGTGAGGAGTGTTTTTATGAAACAGAGAGCCACGGAAAATCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213556 representing NM_001010927
Red=Cloning site Green=Tags(s)

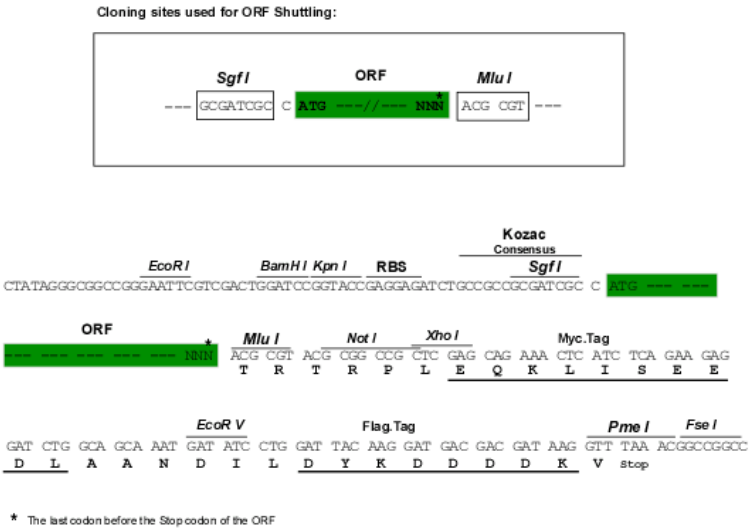
MEGPRENQDPPPRPLARHLSDADRLRKVIQELVDTEKSYVKDLSCLFELYLEPLQNETFLTQDEMESLFG
SLPEMLEFQKVFLETLEDGISASSDFNTLETPSQFRKLLFSLGGSFLYYADHFKLYSGFCANHIKVQKVL
ERAKTDKAFKAFLDARNPTKQHSSTLESYLIKPVQRVLKYPLLLKELVSLTDQESEEHYHLTEALKAMEK
VASHINEMQKIYEDYGTVFDQLVAEQSGTEKEVTELSMGELLMHSTVSWLNPFLSLGKARKDLELTVFVF
KRAVILVYKENCKLKKKLPSNSRPAHNSTDLDPFKFRWLIPISALQVRLGNPAGTENNSIWELIHTKSEI
EGRPETIFQLCCSDSESKTNIVKVIRSILRENFRRHIKCELPLEKTCKDRLVPLKNRVPVSAKLASSRSL
KVLKNSSSNEWTGETGKGTLLDSDEGSLSSGTQSSGCPTAEGRQDSKSTSPGKYPHPGLADFADNLIKES
DILSDEDDDHRQTVKQGSPTKDIEIQFQRLRISEDPDVHPEAEQQPGPESGEGQKGGEQPKLVRGHFCPI
KRKANSTKRDRGTLLKAQIRHQSLDSQSENATIDLNSVLEREFSVQSLTSVVSEECFYETESHGKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/ja1398_f06.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_001010927

**ORF Size:** 1878 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 or by calling 301.340.3188 option 3 for pricing and delivery.

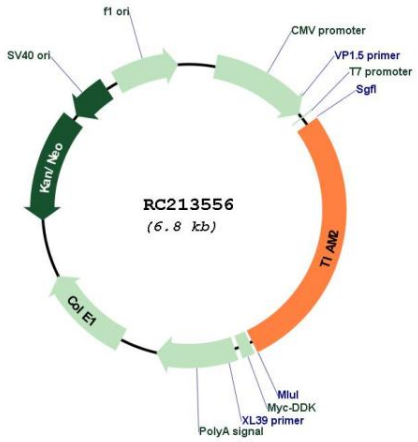
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

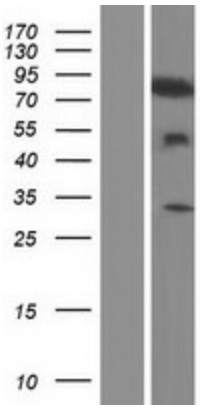
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

| | |
|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001010927.2, NP_001010927.1 |
| **RefSeq Size:** | 2668 bp |
| **RefSeq ORF:** | 1881 bp |
| **Locus ID:** | 26230 |
| **UniProt ID:** | Q8IVF5 |
| **Cytogenetics:** | 6q25.2-q25.3 |
| **Protein Families:** | Druggable Genome |
| **Protein Pathways:** | Chemokine signaling pathway, Regulation of actin cytoskeleton |
| **MW:** | 70.6 kDa |
| **Gene Summary:** | This gene encodes a guanine nucleotide exchange factor. A highly similar mouse protein specifically activates ras-related C3 botulinum substrate 1, converting this Rho-like guanosine triphosphatase (GTPase) from a guanosine diphosphate-bound inactive state to a guanosine triphosphate-bound active state. The encoded protein may play a role in neural cell development. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008] |

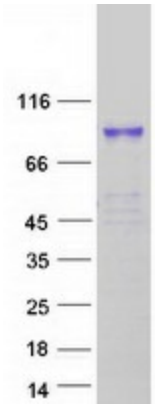
## Product images:




Circular map for RC213556




Western blot validation of overexpression lysate (Cat# [LY423235]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213556 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).




Coomassie blue staining of purified TIAM2 protein (Cat# [TP313556]). The protein was produced from HEK293T cells transfected with TIAM2 cDNA clone (Cat# RC213556) using MegaTran 2.0 (Cat# [TT210002]).