

## Product datasheet for RC222386

### TIAM2 (NM\_012454) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** TIAM2 (NM\_012454) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** TIAM2  
**Synonyms:** STEF; TIAM-2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC222386 representing NM\_012454  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

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ACAGGACAAATGCCCCAGGGAAGGATTTCCAGGGCATCAGTGCTGCTTTCTCAACTGAGAATGGCTTCCA  
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TCTTCAAGCCCCTGGTCACTGTGCAAGAAGGAAAGGAAAGCTTGAGCTGGTGGCACGAAGGAAATGGAACA  
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222386 representing NM\_012454  
Red=Cloning site Green=Tags(s)

MGNSDSQYTLQGSKNHSNTITGAKQIPCSLKIRGIHAKKEKSLHGWHGHSNGAGYKSRSLARSCLSHFKS  
NQPYASRLGGPTCKVSRGVAYSTHRTNAPGKDFQGISAAFSTENGFHVSVELADNHITSRDCNGHLLNC  
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IQYSSFTLPCRPKAFVEDTAKKDLSKARMRISDWTGSLSRKKRKLQEPSRKEGSDYFDSRSDGLNTDV  
QGSSQASAFWWSGGSTQILSRSESTHAIGSDPLRQNIYENFMRELEMSRTNTENIETSTETAESSESL  
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DTLRLLKNQTKNLLQKIDMDSKMKMAELQLSVSDPKNRKAIENQIQWEQNLEKFHMDLFRMRCYLAS  
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DERQHLSRIFISDVLPDGLAYGELRKGNEIMTLNGEAVSDLDLKQMEALFSEKSVGLTLIARPPDTKAT  
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TCKDRLVPLKNRVPVSAKLASSRSLKVLKNSSSNEWGETGKGTLLDSDEGLSSGTQSSGCPTAEGRQD  
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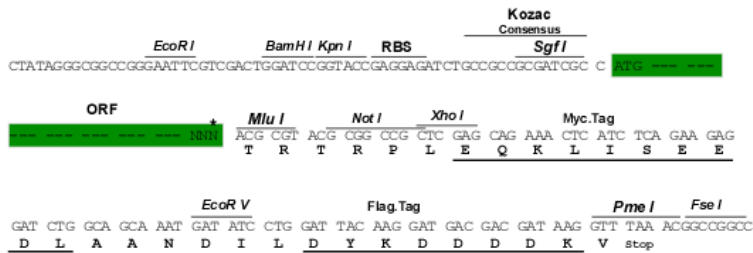
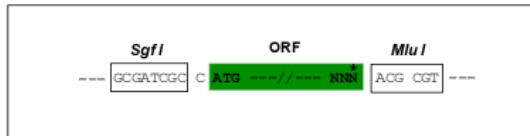
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

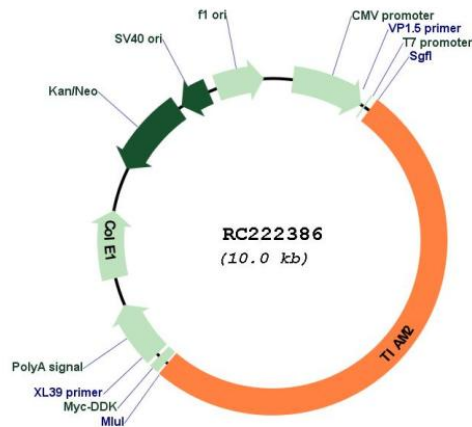
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_012454

ORF Size: 5103 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.

<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_012454.3</a></u> , <u><a href="#">NP_036586.2</a></u>
<b>RefSeq Size:</b>	5916 bp
<b>RefSeq ORF:</b>	5106 bp
<b>Locus ID:</b>	26230
<b>UniProt ID:</b>	<u><a href="#">Q8IVF5</a></u>
<b>Cytogenetics:</b>	6q25.2-q25.3
<b>Domains:</b>	RhoGEF, PDZ, RBD
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Chemokine signaling pathway, Regulation of actin cytoskeleton
<b>MW:</b>	189.9 kDa
<b>Gene Summary:</b>	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]