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Product datasheet for RG214003

TEM4 (ARHGEF17) (NM_014786) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Tag: TurboGFP

Symbol: TEM4

Synonyms: p164-RhoGEF; P164RHOGEF; RHOGEF17; TEM4

Mammalian Cell Selection: Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG214003 ORF sequence, codon optimized.
Due to the complexity of NM_014786, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGATGGCGCACCGCGCCCCCAGCTTTACAGATCCGTATCATTCAAGCTCCTGGAAAGGTGGTCTG
GGGGACCAGGGCTGAGGGAGGAGGACACCGATACACCTGGTTTGCGCCGACGCGCTTCCTGCAGGCCTAC
CACGGCTGCCCGGGGGCAGCCCAGTAGAAGGGTGTCAAAGCTTGCGAGCGGTCCACTCGCTGCTCCCGCC
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AACCCTGAAGGACGATGACCTTTGGAGTTCCCGCGGTTCAGGGGGATGGGGAGTGTATAGAAGTCCATCT

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TTCGGAGCCGGTGAGGGGCTCCTGAGGAGTCAGGCCCGCACCAGGGCAAAGGGGCCTGGGGGTACATCCC
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ACAGCCTGAAAATAGTGTGCTGTGCGACCCTTCACTGGTTGACGAGATCTTTGACCAGATTCCCGAGTTG
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CCACTAATCACTTGCTTCTCTGGCGGGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG214003 representing NM_014786
Red=Cloning site Green=Tags(s)

MADGAPRPQLYRSVSFKLLERWSGGPGLREEDTDTPGLRRRASCRPTTAARGQPSRRVSKLASGPLAAPA
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PSADSESPGTPSPDGAAWEPPARESRQPPTPPPRTCFPLAGLRSARPLTGPETEGRLRRPQQQQERAQRP
ADGLHSWHIFSQPQAGARASCSSSSIAASYPVSRSRAASSSEEEEEGPPQLPGAQSPAYHGGHSSGSDDD
RDGEGGHRWGGRPGLRPGSSLLDQDCRPDSDGLNLSSMNSAGVSGSPEPPTSPRAPREEGLREWGSGSPP
CVPGPQEGLRPMSDSVGGAFRVAKVSFPSYLASPAGSRGSSRYSSTETLKDDDLWSSRGSGGWGVYRSPS
FGAGEGLLRSQARTRAKGPGGTSRALRDGGFEPEKSRQRKSLSNPDIASETLTLLSFLRSDLSELRVRKP
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EPTPASKCCSKPQVDMRKHVAMTLLDTEQSYVESLRTLMQGYMQPLKQPENSVLCDPSLVDEIFDQIPEL
LEHHEQFLEQVRHCMQTWHAQQKVGALLVQSFSKDVLVNIYSAYIDNFLNAKDAVRVAKEARPAFLKFLE
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AERHARVLQEIEAHIEGMEDLQAPLRRFLRQEMVIEVKAIGGKKDRSLFLFTDLIVCTTLKRKSGSLRRS
SMSLYTAASVIDTASKYKMLWKLPLEDADIIKGASQATNRENIQKAISRLDEDLTTLGQMSKLSESLGFP
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RKLASSKSCLDPEFLKAIPIMKTRSGMQFSCAAPTLNSCPEPSPEVWVCNSDGYVGQVCLLSLRAEPDVE
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SSEEEQEPGFLPLSGSFGPGGPCGTSPMDGRALRRSSHGSFTRGSLEDLLSVDPEAYQSSVWLGTEDGCV
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FEQLAEVDVTPPVHRMLAGSDAIIRQHKAACLRITALLVCEELLWVGTSAGVVLTMPTSPGTVSCPRAPL
SPTGLGQGHTGHVRFLAAVQLPDGFNLLCPTPPPPPDTGPEKLPSLEHRDSPWHRGPAPARPKMLVISGG
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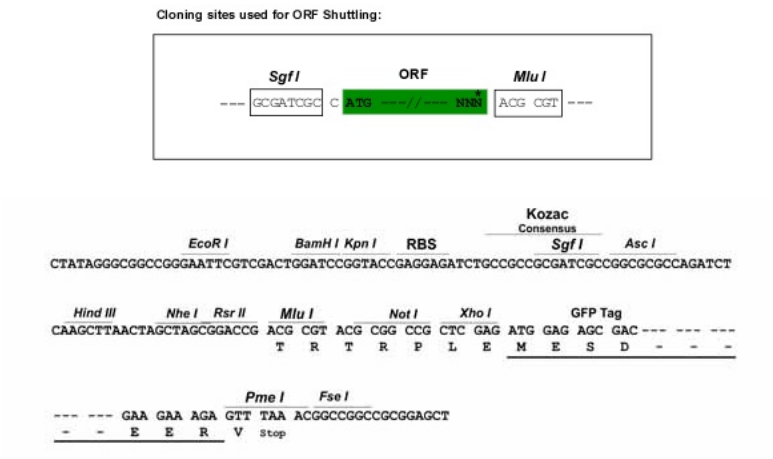
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014786

ORF Size: 6189 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:

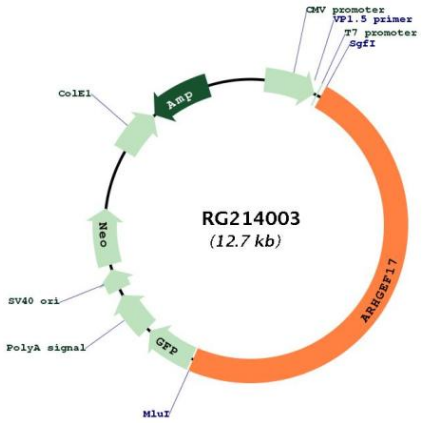
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_014786.2, NP_055601.2

RefSeq Size:	7830 bp
RefSeq ORF:	6192 bp
Locus ID:	9828
UniProt ID:	Q96PE2
Cytogenetics:	11q13.4
Protein Families:	Druggable Genome
Gene Summary:	Acts as guanine nucleotide exchange factor (GEF) for RhoA GTPases.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG214003