

Product datasheet for **RG214195**

VAC14 (NM_018052) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	VAC14
Synonyms:	ArPIKfyve; TAX1BP2; TRX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG214195 representing NM_018052
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGAACCCGAGAAGGATTTTCGCGCGCTCACGCCTAACATCGTGCGCGCCCTCAATGACAAGCTGTACG
AAAAGCGGAAGGTGGCAGCGCTGGAGATCGAGAAGCTGGTCCGGGAGTTTCGTGGCCCAAGAACAATACCGT
GCAATCAAGCATGTGATCCAGACCTGTCCCAGGAGTTTGCCTGTCTCAGCACCCCCACAGCCGGA
GGGGGCTCATCGGCTGGCGCCTGCTCCATCGCACTGGGCAAGGACTCAGGGCTCTACCTGAAGGAGC
TGATCGAGCCAGTGCTGACCTGCTTCAATGATGCAGACAGCAGGCTGCGCTACTATGCCTGCGAGGCCCT
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CCTGATGAAGCTGGTCACCCCGAGGACGACGAGCTGGATGAGCTGAGACCTGGGCAGAGGCAGGCAGAG
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AGCCACTCAGAGCTCCAGGTGCCACCCCTGGCAGAGCCGGCCTACTGAACACCTCTGGTACCAAGGCT
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ACCACGGTGTCCCTCTGCTTCTCACCCAGAATACCGGCACGCCTATGACCTCATCCAGAAGTTTGGGG
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CTCATGCTCCTGCCGAGAGCAGCGCCTTCCAGCTGCTCTCGACCGGCTCCAGTGCGTGCCCAACCCCTG
AGCTGCTGCAGACCGAAGACAGTCTAAAGGCAGCCCCAAGTCCAGAAAGCTGACTCCCTAGCATCGA
CTACGAGAGCTGCTGCAGCACTTTGAGAAGGTCCAGAACAGCACCTGGAAGTGCGGCACCAAGCGGAGC
GGCGTGGGACCACTGGACCGGAGGTTGTCCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence:

>RG214195 representing NM_018052

Red=Cloning site Green=Tags(s)

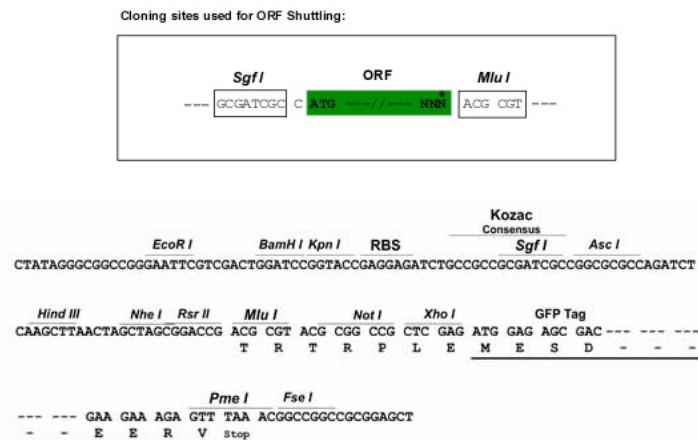
MNPEKDFAPLTPNIVRALNDKLYEKRVAALEIEKLVREFVAQNNTVQIKHVIQTLNQEFALSQHPHSRK
GGLIGLAACSIAGKDSGLYLKELIEPVLTCFNDADSRRLRYACEALYNIVKVARGAVLPHFNVLFDGLS
KLAADPDPNVKSGSELLDRLLKDIVTESNKFVLSFIPLLRERIYSNNQYARQFIISWILVLESVPDINL
LDYLPEILDGLFQILGDNGKEIRKMCVVLEFLKEIKKNPSSVKFAEMANILVIHCQTDDLIQLTAMC
WMREFIQLAGRVMLPYSSGILTAVLPCLAYDDRKKSIEVANVCNQLMKLVTPEDDELDELDPGQRQAE
PTPDDALPKQEGTASGGPDGSCDSSFSGISVFTAASTERAPVTLHLDGIVQVLNCHLSDTAIGMMTRIA
VLKWL YHLYIKTPRKMFRHTDSLFPILLQTLSDSDEVLKDLEVLAEIASSPAGQTDGPGPLDGPDLQA
SHSELQVPTPRAGLLNTSGTKGLECSPSTPTMNSYFYKFMINLLKRFSSERKLEVRGPFIRQLCLLL
NAENIFHSMADILLREEDLKFASTMVHALNTILLSTELFQLRNQLKDLKLTLESQNLFCCLYRSWCHNPV
TTVSLCFLTQNYRHAYDLIQKFGDLEVTVDFLAEVDKLVQLIECPIFTYLRQLLDVKNPNYLIKALYGL
LMLLPQSSAFQLLSHRLQCVNPPELLQTEDSLKAAPKSQKADSPSIDYAELLQHFQVQNKHLEVRHQRS
GRGDHLDRRVVL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_018052

ORF Size:

2346 bp

OTI Disclaimer:

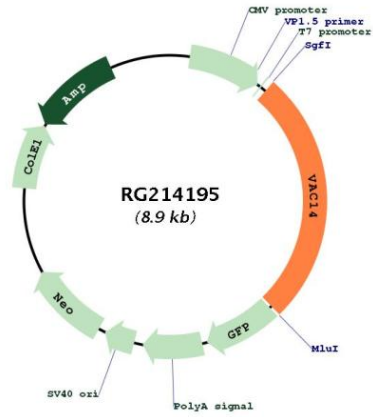
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_018052.5
RefSeq Size:	3107 bp
RefSeq ORF:	2349 bp
Locus ID:	55697
UniProt ID:	Q08AM6
Cytogenetics:	16q22.1-q22.2
Gene Summary:	This gene encodes a scaffold protein that is a component of the PIKfyve protein kinase complex. This complex is responsible for the synthesis of phosphatidylinositol 3,5-bisphosphate, an important component of cellular membranes, from phosphatidylinositol 3-phosphate. Mice lacking a functional copy of this gene exhibit severe neurodegeneration. Mutations in the human gene have been identified in patients with a childhood onset progressive neurological disorder characterized by impaired movement, dystonia, and striatal abnormalities. [provided by RefSeq, May 2017]

Product images:



Circular map for RG214195