

Product datasheet for **RG234921**

VAV1 (NM_001258207) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VAV1 (NM_001258207) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	VAV1
Synonyms:	VAV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG234921 representing NM_001258207
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGCTGTGGCGCAATGCACCCACTGGCTCATCCAGTGCCGGGTGCTGCCGCCAGCCACCGGTGA
 CCTGGGATGGGGCTCAGGTGTGTGAACTGGCCAGGCCCTCCGGGATGGTGTCTTCTGTGTCAGCTGCT
 TAACAACCTGCTACCCCATGCCATCAACCTGCGTGAGGTCAACCTGCGCCCCAGATGTCCAGTTCCTG
 TGCCTTAAGAACATTAGAACCTTCTGTCCACCTGCTGTGAGAAGTTCGGCCTCAAGCGGAGCGAGCTCT
 TCGAAGCCTTTGACCTCTTCGATGTGCAGGATTTGGCAAGGTCACTACACCCTGTCTGCTCTGCCTG
 GACCCCGATCGCCGAGAACAGGGGGATCATGCCCTTCCCACCGAGGAGGAGTGTAGGTGATGAAGAC
 ATCTACAGTGGCCTGTCCGACCAGATCGACGACACGGTGGAGGAGGATGAGGACCTGTATGACTGCGTGG
 AGAATGAGGAGGGGAAGGCGACGAGATCTATGAGGACCTCATGCGCTCGGAGCCCGTGTCCATGCCGA
 TTTCTTGAAGCCCTGCAACGGTTCCTGAAACCTCAAGACATTGAGATCATCTTTATCAACATTGAGGAC
 CTGCTTCGTGTTCACTCACTTCTAAAGGAGATGAAGGAAGCCCTGGGCACCCCTGGCGCAGCCAATC
 TCTACCAGGTCTTCATCAATACAAGGAGAGGTTCTCGTCTATGGCCGCTACTGCAGCCAGGTGGAGTC
 AGCCAGCAAACACCTGGACCGTGTGGCCGACGCCGGGAGGACGTGCAGATGAAGCTGGAGGAATGTTCT
 CAGAGAGCCAACAACGGGAGGTTACCCCTGCGGGACCTGCTGATGGTGCCTATGCAGCGAGTTCCTAAAT
 ATCACCTCCTTCTCCAGGAGCTGGTGAACACACGCGAGGAGGCGATGGAGAAGGAGAACCTGCGGCTGGC
 CCTGGATGCCATGAGGGACCTGGCTCAGTGCCTGAACGAGGTCAAGCGAGACAACGAGACACTGCGACAG
 ATCACCAATTTCCAGCTGTCCATTGAGAACCTGGACAGTCTCTGGCTCACTATGGCCGGCCCAAGATCG
 ACGGGGAACCTCAAGATCACCTCGGTGGAACGGCCTCAAGATGGACAGGTATGCCTTCTGCTCGACAA
 AGCTCTACTCATCTGTAAGCGCAGGGGAGACTCCTATGACCTCAAGGACTTTGTAACCTGCACAGCTTC
 CAGGTTCCGGGATGACTCTTCAGGAGACCGAGACAACAAGAAGTGGAGCCACATGTTCTCTGATCGAGG
 ACCAAGGTGCCAGGGCTATGAGCTGTTCTTCAAGACAAGAGAATTGAAGAAGAAGTGGATGGAGCAGTT
 TGAGATGGCCATCTCCAACATCTATCCGGAGAATGCCACCGCCAACGGGCATGACTTCCAGATGTTCTCC
 TTTGAGGAGACCACATCCTGCAAGGCCTGTGAGATGCTGCTTAGAGGTACCTTCTATCAGGGCTACCGCT
 GCCATCGGTGCCGGGCATCTGCACACAAGGAGTGTCTGGGAGGGTCCCTCCATGTGGCCGACATGGGCA
 AGATTTCCAGGAACTATGAAGAAGGACAACTACATCGCAGGGCTCAGGACAAAAGAGGAATGAGCTG
 GGTCTGCCAAGATGGAGGTGTTTCAGGAATACTACGGGCTTCTCCACCCCTGGAGCCATTGGACCCCT
 TTCTACGGCTCAACCCTGGAGACATTGTGGAGCTCACGAAGGCTGAGGCTGAACAGAAGCTGGTGGGAGGG
 CAGAAATACATCTACTAATGAAATTGGCTGGTTTCTTGTAAACAGGGTGAAGCCCTATGTCCATGGCCCT
 CCTCAGGACCTGTCTGTTTCATCTCTGGTACGCAGGCCCATGGAGCGGGCAGGGGAGAGAGCATCCTGG
 CCAACCGCTCGGACGGGACTTTCTTGGTGGCAGAGGGTGAAGGATGCAGCAGAATTTGCCATCAGCAT
 TAAATATAACGTCGAGGTCAAGCACATTAATATCATGACAGCAGAAGGACTGTACCGGATCACAGAGAAA
 AAGGCTTTCCGGGGGCTTACGGAGCTGGTGGAGTTTTACCAGCAGAACTCTTAAAGGATTGCTTCAAGT
 CTCTGGACACCACCTTGCAGTTCCTTCAAGGAGCCTGAAAAGAGAACCATCAGCAGGCCAGCAGTGGG
 AAGCACAAGATTTTTGGCAGCCAAAGCCCGCTATGACTTCTGCGCCGAGACCGATCAGAGCTGTCG
 CTAAGGAGGGTGACATCATCAAGATCCTTAACAAGAAGGGACAGCAAGGCTGGTGGCGAGGGGAGATCT
 ATGGCCGGGTTGGCTGGTTCCTGCCAACTACGTGGAGGAAGATTATTCTGAATACTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

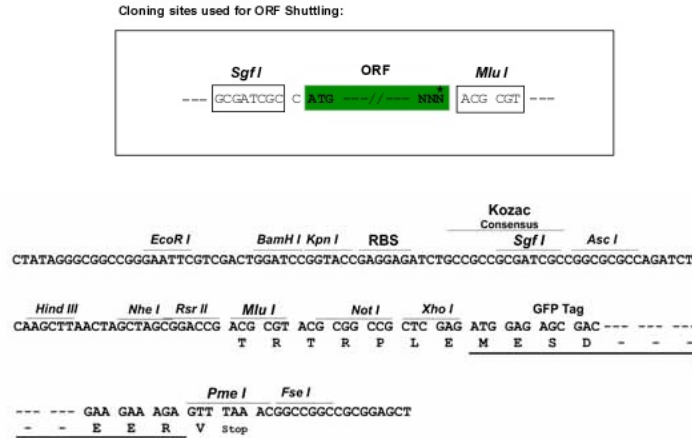
Protein Sequence: >RG234921 representing NM_001258207
 Red=Cloning site Green=Tags(s)

```
MELWRQCTHWLIQCRVLPSPHRVTWDGAQVCELAQALRDGVLLCQLLNLLPHAINLREVNLRPQMSQFL
CLKNIRTFLLSTCCEKFGGLKRSELFDFDLFDVQDFGKVIYTLALSWSWPIAQNRRGIMPFPTTEESVGD
IYSGLSQIDDTVEEDEDLYDCVENEEAEGDEIYEDLMRSEPVSMPHFLKPLQRFLKPDIEIIFINIED
LLRVHTHFLKEMKEALGTPGAANLYQVFIKYKERFLVYGRYCSQVESASKHLDRVAAAAREDVQMKLEEC
QRANNGRFTLRDLLMVPMQRVLYHLLQELVKHTQEAMEKENLRLALDAMRDLAQCVNEVKRDNETLRQ
ITNFQLSIENLDQSLAHYGRPKIDGELKITSVERRSKMDRYAFLLDKALLICKRRGDSYDLKDFVNLHSF
QVRDSSGDRDNKKWSHMFLIEDQGAQGYELFFKTRELKKKWMQFEMAI SNIYPENATANGHDFQMFS
FEETTSCKACQMLLRGTFYQGYRCHRCRASAHEKELGRVPPCGRHGQDFPGTMKKDKLHRRADKKRNL
GLPKMEVFQEYYGLPPPGAIGPFLRLNPGDVELTKAEAEQNWWEGRNTSTNEIGWFPCNRVKPYVHGP
PQDLSVHLWYAGPMERAGAESILANRSDGTFLVRQVRKDAAEFAISIKYNVEVKHIKIMTAEGLYRITEK
KAFRGLTELVFQYQNSLKDCFKSLDTTLQFPFKEPEKRTISRPVAVGSKYFGTAKARYDFCARDSELS
LKEGDIILNKKGQGWWRGEIYGRVGFPPANYVEEDYSEYC
```

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001258207

ORF Size: 2439 bp

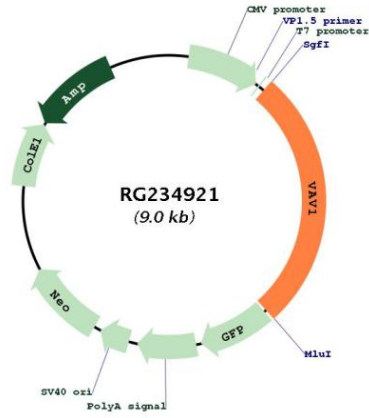
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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.
RefSeq:	NM_001258207.2
RefSeq Size:	2848 bp
RefSeq ORF:	2442 bp
Locus ID:	7409
UniProt ID:	P15498
Cytogenetics:	19p13.3
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	B cell receptor signaling pathway, Chemokine signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity, Regulation of actin cytoskeleton, T cell receptor signaling pathway
Gene Summary:	<p>This gene is a member of the VAV gene family. The VAV proteins are guanine nucleotide exchange factors (GEFs) for Rho family GTPases that activate pathways leading to actin cytoskeletal rearrangements and transcriptional alterations. The encoded protein is important in hematopoiesis, playing a role in T-cell and B-cell development and activation. The encoded protein has been identified as the specific binding partner of Nef proteins from HIV-1. Coexpression and binding of these partners initiates profound morphological changes, cytoskeletal rearrangements and the JNK/SAPK signaling cascade, leading to increased levels of viral transcription and replication. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Apr 2012]</p>

Product images:



Circular map for RG234921