

Product datasheet for **RG224806**

VAV1 (NM_005428) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VAV1 (NM_005428) 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:

>RG224806 representing NM_005428
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCTGTGGCGCAATGCACCCACTGGCTCATCCAGTGCCGGGTGCTGCCGCCAGCCACCGGTGA
 CCTGGGATGGGGCTCAGGTGTGTGAACTGGCCAGGCCCTCCGGGATGGTGTCTTCTGTGTCAGCTGCT
 TAACAACCTGCTACCCCATGCCATCAACCTGCGTGAGGTCAACCTGCGCCCCAGATGTCCAGTTCCTG
 TGCCTTAAGAACATTAGAACCTTCTGTCCACCTGCTGTGAGAAGTTCGGCCTCAAGCGGAGCGAGCTCT
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 GACCCCGATCGCCGAGAACAGGGGGATCATGCCCTTCCCACCGAGGAGGAGTGTAGGTGATGAAGAC
 ATCTACAGTGGCCTGTCCGACCAGATCGACGACACGGTGGAGGAGGATGAGGACCTGTATGACTGCGTGG
 AGAATGAGGAGGGGAAGGCGACGAGATCTATGAGGACCTCATGCGCTCGGAGCCCGTGTCCATGCCGCC
 CAAGATGACAGAGTATGACAAGCGCTGCTGCTGCCTGCGGGAGATCCAGCAGACGGAGGAGAAGTACACT
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 ACGGGCATGACTTCCAGATGTTCTCTTTGAGGAGACCACATCCTGCAAGGCCTGCAGATGCTGCTTAG
 AGGTACCTTCTATCAGGGCTACCGCTGCCATCGGTGCCGGGCATCTGCACACAAGGAGTGTCTGGGGAGG
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 GCGCCCGAGACCGATCAGAGCTGTCGCTCAAGGAGGTGACATCAAGATCCTTAACAAGAAGGGACA
 GCAAGGCTGGTGGCAGGGGAGATCTATGGCCGGTGGCTGGTTCCTGCCAATACGTGGAGGAAGAT
 TATTCTGAATACTGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG224806 representing NM_005428
 Red=Cloning site Green=Tags(s)

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MELWRQCTHWLIQCRVLPSPHRVTWDGAQVCELAQALRDGVLLCQLLNLLPHAINLREVNLRPQMSQFL
CLKNIRTFLLSTCCEKFGFLKRSELFDFDLFDVQDFGKVIYTLALSWSWTPIAQNRGIMPFPTEESVGDDE
IYSGLSQIDDTVEEDEDLYDCVENEEAEGDEIYEDLMRSEPVSMPPKMTEYDKRCCCLREIQQTEEKYT
DTLGSIQQHFLKPLQRFLKPDIEIIFINIEDLLRVHTHFLKEMKEALGTPGAANLYQVFIKYKERFLVY
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MEKENLRLALDAMRDLAQCNEVKRDNETLRQITNFQLSIENLDQSLAHYGRPKIDGELKITSVERRSKM
DRYAFLLDKALLICKRRGDSYDLKDFVNLHSFQVRDSSGDRDNKKWSHMFLIEDQGAQGYELFFKTRE
LKKKWMEQFEMASNIYPENATANGHDFQMFSEETTSCACQMLLRGTFYQGYRCHRCRASAHKECLGR
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EAEQNWWEGRNTSTNEIGWPCNRVKPYVHGPPQDLSVHLWYAGPMERAGAESILANRSDGTFLVRQVRK
DAAEFAISIKYNVEVKHIKIMTAEGLYRITEKKAFRGLTELVFVYQNSLKDCFKSLDTTLQFPFKEPEK
RTISRPVAGSTKYFGTAKARYDFCARDRELSLKEGDIKILNKKGQGWWRGEIYGRVGFPPANYVEED
YSEYC
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_005428

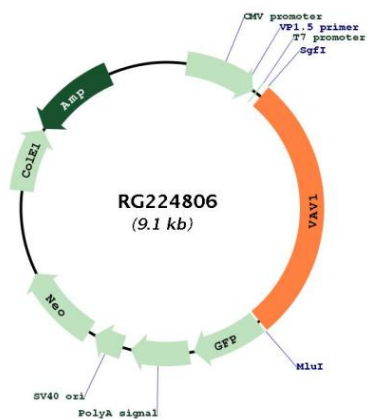
ORF Size: 2535 bp

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:	<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_005428.4
RefSeq Size:	2888 bp
RefSeq ORF:	2538 bp
Locus ID:	7409
UniProt ID:	P15498
Cytogenetics:	19p13.3
Domains:	RhoGEF, SH2, SH3, CH, PH, DAG_PE-bind
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:	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]

Product images:



Circular map for RG224806