

## Product datasheet for RC218352

### VAV3 (NM\_001079874) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VAV3 (NM_001079874) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VAV3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218352 representing NM_001079874 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCAATTTTTACATTTCTTTTCAGAACAAAGGGACACTCAAACCTACCAGAGAAACGGACCAATGGACTGC  
GAAGAACTCCTAAACAGGTGGATCCAGGTTTACCAAAGATGCAGGTTCATTAGGAACTATTCTGGAACACC  
ACCCCAGCTCTGCATGAAGGACCCCTTTACAGCTCCAGGCCGGGGATACCGTTGAACTTCTGAAAGGA  
GATGCACACAGTCTGTTTTGGCAGGGCAGAAATTTAGCATCTGGAGAGGTTGGATTTTTTCCAAGTGATG  
CAGTCAAGCCTTGCCCATGTGTGCCAAACCAGTAGATTATTCTTGCCAACCCTGGTATGCTGGAGCAAT  
GGAAAGATTGCAAGCAGAGACCGAACTTATTAATAGGGTAAATAGTACTTACCTTGTGAGGCACAGGACC  
AAAGAGTCAGGAGAATATGCAATTAGCATTAAGTACAATAATGAAGCAAAGCACATCAAGATTTTAAACA  
GAGATGGCTTTTTTCACATTGCAGAAAATAGAAAATTTAAAAGTTTAAATGGAACCTGTGGAGTACTACAA  
GCATCATTCTCTCAAGGAAGGGTTAGAACCTTAGATACAACCTCTGCAGTTTCCATACAAGGAGCCAGAA  
CATTTCAGCTGGACAGAGGGTAATAGAGCAGGCAACAGCTTGTTAAGTCCAAAAGTGCTGGGCATTGCCA  
TCGCTCGGTATGACTTCTGTGCAAGAGATATGAGAGAGTTGTCTTGTTGAAAGGAGATGTGGTGAAGAT  
TTACACAAAGATGAGTGCAAATGGCTGGTGGAGAGGAGAAGTAAATGGCAGGGTGGGCTGGTTTCCATCC  
ACATATGTGGAAGAGGATGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC218352 representing NM\_001079874  
Red=Cloning site Green=Tags(s)

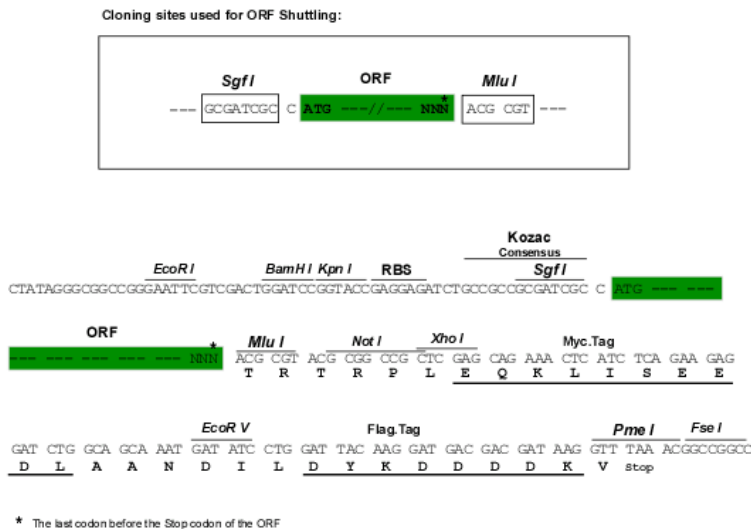
MPIFTFLSEQTLKLPEKRTNGLRRTPKQVDPGLPKMQVIRNYSGTPPPALHEGPPLQLQAGDTEVLLKG  
 DAHSLFWQGRNLASGEVGFPPSDAVKPCPCVPKPVDYSCQPWYAGAMERLQAETELINRVNSTYLVRHRT  
 KESGEYATISIKYNNEAKHIKILTRDGFHIAENRKFKSLMELVEYKHHSLKEGFRITLDTLQFPYKEPE  
 HSAGQRGNRAGNSLLSPKVLGIAIARYDFCARDMRELSLLKGDVVKIYTKMSANGWWRGEVNGRNVGWFPS  
 TYVEEDE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8021\\_d07.zip](https://cdn.origene.com/chromatograms/mk8021_d07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001079874

**ORF Size:** 861 bp

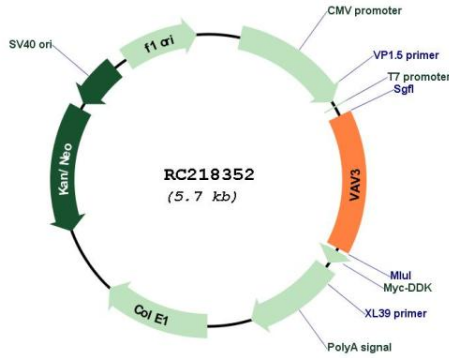
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

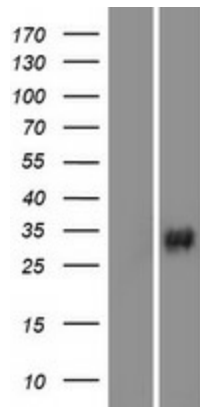
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>	<a href="#">NM_001079874.2</a>
<b>RefSeq Size:</b>	3115 bp
<b>RefSeq ORF:</b>	864 bp
<b>Locus ID:</b>	10451
<b>UniProt ID:</b>	<a href="#">Q9UKW4</a>
<b>Cytogenetics:</b>	1p13.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	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
<b>MW:</b>	32.4 kDa
<b>Gene Summary:</b>	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. This gene product acts as a GEF preferentially for RhoG, RhoA, and to a lesser extent, RAC1, and it associates maximally with the nucleotide-free states of these GTPases. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]

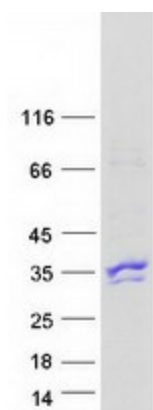
Product images:



Circular map for RC218352



Western blot validation of overexpression lysate (Cat# [LY421571]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218352 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified VAV3 protein (Cat# [TP318352]). The protein was produced from HEK293T cells transfected with VAV3 cDNA clone (Cat# RC218352) using MegaTran 2.0 (Cat# [TT210002]).