

Product datasheet for **MG210938**

Vav3 (BC052739) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Vav3 (BC052739) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Vav3
Synonyms:	MGC27838
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210938 representing BC052739
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCCGTGGAAGCAGTGCCTCAGTGGCTCATCCACAGCAAGGTGCTGCCCCAACCATCGGGTGA
 CCTGGGACTCGGCGCAGGTGTTTCGACCTGGCGCAGACCCTTCGCGATGGAGTCTGCTCTGCCAGCTGCT
 CAACAACCTGCGGCCACACTCCATCAATCTGAAGGAGATCAACCTGAGGCCCCAGATGTCCAGTTTCTC
 TGTTTGAAGAACATCCGGACATTCTGGCCGCTGCTGCGATACCTTTGGAATGAGGAAAAGTGAACCTT
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 CAGCCAGCTGGACAGAGGGTAATAGAACAGGCAACAGCTTGTGAGTCCCAAAGTACTGGGTATTGCCA
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 TTACACGAAGATGAGTGCAATGGCTGGTGGAGAGGTGAAGTAAATGGCAGGGTGGGCTGGTTTCCATCC
 ACATATGTGGAAGAAGATGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210938 representing BC052739
 Red=Cloning site Green=Tags(s)

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MEPWKQCAQWLIHskVLPPNHRVTWDSaQVFDLAQTLRDGVLLCQLLNLRPHSINLKEINLRPQMSQFL
CLKNIRTFLAACCDTFGMRKSELFaFDLFDVRDFGKVIETLSRLSRTPIALATGIRPFPTeesINDEDI
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LESIEKYFMAPLKRFLTAAEFDSVFINIPDLVKVHRSLMQEIHDSIVNKDDQNL YQVFINYKERLVIYGQ
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KANLKLALDAMKDLAQYVNEVKRDNETLREIKQFQLSIENLNQPVLLFGRPQGDGEIRITTLdkHTKQER
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TYVEEDE
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: BC052739

ORF Size: 2543 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.

RefSeq: [BC052739](#), [AAH52739](#)

RefSeq Size: 4770 bp

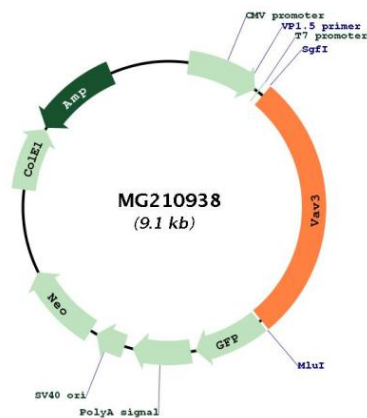
RefSeq ORF: 2543 bp

Locus ID: 57257

Cytogenetics: 3 F3

Gene Summary: Exchange factor for GTP-binding proteins RhoA, RhoG and, to a lesser extent, Rac1. Binds physically to the nucleotide-free states of those GTPases (By similarity). Plays an important role in angiogenesis. Its recruitment by phosphorylated EPHA2 is critical for EFNA1-induced RAC1 GTPase activation and vascular endothelial cell migration and assembly. May be important for integrin-mediated signaling, at least in some cell types. In osteoclasts, along with SYK tyrosine kinase, required for signaling through integrin alpha-v/beta-1 (ITAGV-ITGB1), a crucial event for osteoclast proper cytoskeleton organization and function. This signaling pathway involves RAC1, but not RHO, activation. Necessary for proper wound healing. In the course of wound healing, required for the phagocytotic cup formation preceding macrophage phagocytosis of apoptotic neutrophils. Responsible for integrin beta-2-mediated macrophage adhesion and, to a lesser extent, contributes to beta-3-mediated adhesion. Does not affect integrin beta-1-mediated adhesion.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG210938