

VAV3 Antibody (Internal) Goat Polyclonal Antibody Catalog # ALS12714

### Specification

# VAV3 Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E <u>O9UKW4</u> Human, Monkey Goat Polyclonal 98kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A

## VAV3 Antibody (Internal) - Additional Information

Gene ID 10451

**Other Names** Guanine nucleotide exchange factor VAV3, VAV-3, VAV3

**Target/Specificity** Human VAV3. This antibody is expected to recognize both reported isoforms (NP\_006104.4; NP\_001073343.1).

**Reconstitution & Storage** Store at -20°C. Minimize freezing and thawing.

Precautions

VAV3 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

## VAV3 Antibody (Internal) - Protein Information

Name VAV3

#### Function

Exchange factor for GTP-binding proteins RhoA, RhoG and, to a lesser extent, Rac1. Binds physically to the nucleotide-free states of those GTPases. 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 (By similarity). 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 (ITGB2)-mediated macrophage adhesion and, to a lesser extent, contributes to beta-3 (ITGB3)-mediated adhesion. Does not affect integrin beta-1 (ITGB1)-mediated adhesion (By similarity).

#### **Tissue Location**

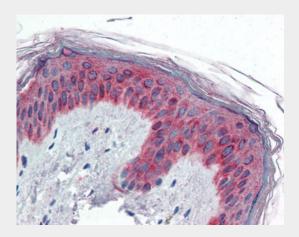
Isoform 1 and isoform 3 are widely expressed; both are expressed at very low levels in skeletal muscle. In keratinocytes, isoform 1 is less abundant than isoform 3. Isoform 3 is detected at very low levels, if any, in adrenal gland, bone marrow, spleen, fetal brain and spinal cord; in these tissues, isoform 1 is readily detectable.

### VAV3 Antibody (Internal) - Protocols

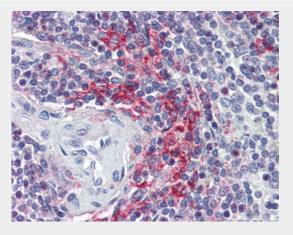
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### VAV3 Antibody (Internal) - Images



Anti-VAV3 antibody IHC of human skin.





# Anti-VAV3 antibody IHC of human spleen.

# VAV3 Antibody (Internal) - Background

Exchange factor for GTP-binding proteins RhoA, RhoG and, to a lesser extent, Rac1. Binds physically to the nucleotide-free states of those GTPases. 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 (By similarity). 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 (ITGB2)-mediated macrophage adhesion and, to a lesser extent, contributes to beta-3 (ITGB3)- mediated adhesion. Does not affect integrin beta-1 (ITGB1)- mediated adhesion (By similarity).

## VAV3 Antibody (Internal) - References

Trenkle T., et al.Nucleic Acids Res. 26:3883-3891(1998). Movilla N., et al.Mol. Cell. Biol. 19:7870-7885(1999). Ota T., et al.Nat. Genet. 36:40-45(2004). Gregory S.G., et al.Nature 441:315-321(2006). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.