

# Vav2 (E-12): sc-30433

## BACKGROUND

The Vav gene was originally identified on the basis of its oncogenic activation during the course of gene transfer assays. The major translational product of the Vav proto-oncogene has been identified as a protein containing an array of structural motifs. This protein, known as Vav, Vav1 or p95Vav, contains an N-terminal helix-loop-helix domain and a leucine zipper motif similar to that of Myc family proteins that, if deleted, causes oncogenic activation. In addition, Vav contains an SH2 domain, which could indicate its role as a substrate for tyrosine kinases. Expression of Vav is limited exclusively to cells of hematopoietic origin, including those of the erythroid, lymphoid and myeloid lineages. These results suggest that Vav may represent a new type of signal transduction molecule involved in the transduction of tyrosine phosphorylation signaling into transcriptional events. Vav2 is a member of the Vav family of oncoproteins and acts as a guanosine nucleotide exchange factor (GEF) for RhoG and RhoA-like GTPases in a phosphotyrosine-dependent manner.

## CHROMOSOMAL LOCATION

Genetic locus: VAV2 (human) mapping to 9q34.2; Vav2 (mouse) mapping to 2 A3.

## SOURCE

Vav2 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Vav2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30433 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

Vav2 (E-12) is recommended for detection of Vav2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Vav2 siRNA (h): sc-41738, Vav2 siRNA (m): sc-41739, Vav2 shRNA Plasmid (h): sc-41738-SH, Vav2 shRNA Plasmid (m): sc-41739-SH, Vav2 shRNA (h) Lentiviral Particles: sc-41738-V and Vav2 shRNA (m) Lentiviral Particles: sc-41739-V.

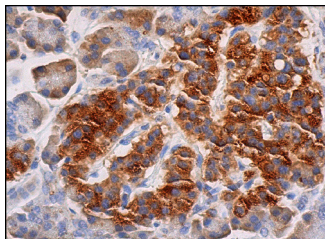
Molecular Weight of Vav2: 100 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, mouse brain extract: sc-2253 or A-431 whole cell lysate: sc-2201.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Vav2 (E-12): sc-30433. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans.

## SELECT PRODUCT CITATIONS

- Chuang, H.C., Lan, J.L., Chen, D.Y., Yang, C.Y., Chen, Y.M., Li, J.P., Huang, C.Y., Liu, P.E., Wang, X., Tan, T.H. 2011. The kinase GLK controls autoimmunity and NF-κB signaling by activating the kinase PKC-θ in T cells. *Nat. Immunol.* 12: 1113-1118.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Vav2 (F-6): sc-271442**, our highly recommended monoclonal alternative to Vav2 (E-12).