

Vav (D-20): sc-34221

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.

REFERENCES

1. Katzav, S., et al. 1989. Vav, a novel human oncogene derived from a locus ubiquitously expressed in hematopoietic cells. *EMBO J.* 8: 2283-2290.
2. Ullrich, A., et al. 1990. Signal transduction by receptors with tyrosine kinase activity. *Cell* 61: 203-212.
3. Coppola, J., et al. 1991. Mechanism of activation of the Vav proto-oncogene. *Cell Growth Differ.* 2: 95-105.
4. Katzav, S., et al. 1991. Loss of the amino-terminal helix-loop-helix domain of the Vav proto-oncogene activates its transforming potential. *Mol. Cell Biol.* 11: 1912-1920.
5. Bustelo, X.R., et al. 1992. Product of Vav proto-oncogene defines a new class of tyrosine protein kinase substrates. *Nature* 356: 68-71.
6. Bustelo, X.R., et al. 1992. Tyrosine phosphorylation of the Vav proto-oncogene product in activated B cells. *Science* 256: 1196-1199.
7. Margolis, B., et al. 1992. Tyrosine phosphorylation of Vav proto-oncogene product containing SH2 domain and transcription factor motifs. *Nature* 356: 71-74.

CHROMOSOMAL LOCATION

Genetic locus: VAV1 (human) mapping to 19p13.3; Vav1 (mouse) mapping to 17 D.

SOURCE

Vav (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Vav 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-34221 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Vav (D-20) is recommended for detection of Vav p95 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Vav (D-20) is also recommended for detection of Vav p95 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Vav siRNA (h): sc-29517, Vav siRNA (m): sc-29518, Vav shRNA Plasmid (h): sc-29517-SH, Vav shRNA Plasmid (m): sc-29518-SH, Vav shRNA (h) Lentiviral Particles: sc-29517-V and Vav shRNA (m) Lentiviral Particles: sc-29518-V.

Molecular Weight of Vav: 95 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MOLT-4 cell lysate: sc-2233 or CTLL-2 cell lysate: sc-2242.

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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Vav (D-7): sc-8039** or **Vav (B-6): sc-55482**, our highly recommended monoclonal alternatives to Vav (D-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Vav (D-7): sc-8039**.