SANTA CRUZ BIOTECHNOLOGY, INC.

Vav (m): 293T Lysate: sc-124542

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. and Schlessinger, J. 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. Margolis, B., et al. 1992. Tyrosine phosphorylation of Vav proto-oncogene product containing SH2 domain and transcription factor motifs. Nature 356: 71-74.
7. Bustelo, X.R. and Barbacid, M. 1992. Tyrosine phosphorylation of the Vav proto-oncogene product in activated B cells. Science 256: 1196-1199.
8. Romero, F., et al. 1996. p95vav associates with the nuclear protein Ku-70. Mol. Cell. Biol. 16: 37-44.

CHROMOSOMAL LOCATION

Genetic locus: Vav1 (mouse) mapping to 17 D.

PRODUCT

Vav (m): 293T Lysate represents a lysate of mouse Vav transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Vav (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Vav antibodies. Recommended use: 10-20 µl per lane.

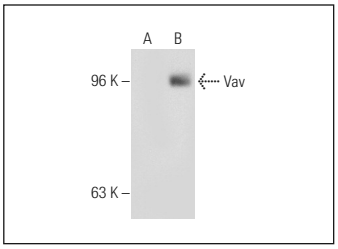
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Vav (B-6): sc-55482 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Vav expression in Vav transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

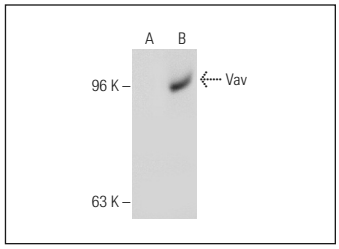
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Vav (B-6): sc-55482. Western blot analysis of Vav expression in non-transfected: sc-117752 (**A**) and mouse Vav transfected: sc-124542 (**B**) 293T whole cell lysates.



Vav (D-7): sc-8039. Western blot analysis of Vav expression in non-transfected: sc-117752 (**A**) and mouse Vav transfected: sc-124542 (**B**) 293T whole cell lysates.

RESEARCH USE

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