

Vav2 (H-200): sc-20803

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 (H-200) is a rabbit polyclonal antibody raised against amino acids 131-330 mapping near the N-terminus 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.

Available as agarose conjugate for immunoprecipitation, sc-20803 AC, 500 µg/0.25 ml agarose in 1 ml.

APPLICATIONS

Vav2 (H-200) 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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Vav2 (H-200) is also recommended for detection of Vav2 in additional species, including equine, canine, porcine and avian.

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

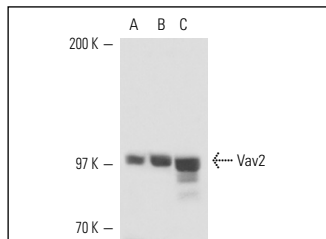
RESEARCH USE

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

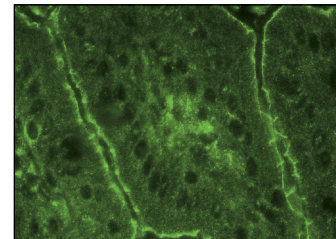
STORAGE

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

DATA



Vav2 (H-200): sc-20803. Western blot analysis of Vav2 expression in HeLa (A) and A-431 (B) whole cell lysates and mouse brain tissue extract (C).



Vav2 (H-200): sc-20803. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Aoki, K., et al. 2005. Local phosphatidylinositol 3,4,5-trisphosphate accumulation recruits Vav2 and Vav3 to activate rac1/Cdc42 and initiate neurite outgrowth in nerve growth factor-stimulated PC12 cells. *Mol. Biol. Cell* 16: 2207-2217.
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- Barda-Saad, M., et al. 2010. Cooperative interactions at the SLP-76 complex are critical for actin polymerization. *EMBO J.* 29: 2315-2328.
- Elali, A., et al. 2011. Liver X receptor activation enhances blood-brain barrier integrity in the ischemic brain and increases the abundance of ATP-binding cassette transporters ABCB1 and ABCC1 on brain capillary cells. *Brain Pathol.* 22: 175-187.
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Try **Vav2 (F-6): sc-271442**, our highly recommended monoclonal alternative to Vav2 (H-200).