



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Vav3 (F-11): sc-518196

BACKGROUND

The Vav family of Rho guanine nucleotide exchange factors (GEFs) orchestrate signaling events following lymphocyte antigen receptor activation. Vav3, like Vav (also known as Vav1 or p95Vav), undergoes tyrosine phosphorylation downstream of T cell receptor cross-linkage, and subsequently interacts with two adaptor molecules, SLP76 and 3BP2. Following these events, however, the paths of Vav and Vav3 diverge; Vav affects IL-2 promoter activity, while Vav3 impacts gene transcription linked to serum response element (SRE). Furthermore, Vav3 expression follows a cell cycle-dependent pattern, with transient upregulation occurring during mitosis. Enforced Vav3 expression leads to the appearance of multinucleate cells, implicating a role for Vav3 in the control of cytokinesis.

REFERENCES

- Romero, F., et al. 1996. p95^{vav} associates with the nuclear protein Ku-70. *Mol. Cell. Biol.* 16: 37-44.
- Adam, L., et al. 2000. Interferon- α signaling promotes nucleus-to-cytoplasmic redistribution of p95Vav, and formation of a multisubunit complex involving Vav, Ku80, and Tyk2. *Biochem. Biophys. Res. Commun.* 267: 692-696.
- Fujikawa, K., et al. 2002. Vav3 is regulated during the cell cycle and effects cell division. *Proc. Natl. Acad. Sci. USA* 99: 4313-4318.
- Fujikawa, K., et al. 2003. Vav1/2/3-null mice define an essential role for Vav family proteins in lymphocyte development and activation but a differential requirement in MAPK signaling in T and B cells. *J. Exp. Med.* 198: 1595-1608.
- Zakaria, S., et al. 2004. Differential regulation of TCR-mediated gene transcription by Vav family members. *J. Exp. Med.* 199: 429-434.
- Dong, Z., et al. 2006. Vav3 oncogene is overexpressed and regulates cell growth and androgen receptor activity in human prostate cancer. *Mol. Endocrinol.* 20: 2315-2325.
- Sauzeau, V., et al. 2006. Vav3 proto-oncogene deficiency leads to sympathetic hyperactivity and cardiovascular dysfunction. *Nat. Med.* 12: 841-845.
- Colomba, A., et al. 2007. Activation of Rac1 and the exchange factor Vav3 are involved in NPM-ALK signaling in anaplastic large cell lymphomas. *Oncogene* 27: 2728-2736.

CHROMOSOMAL LOCATION

Genetic locus: VAV3 (human) mapping to 1p13.3.

SOURCE

Vav3 (F-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 122-146 of Vav3 of human origin.

PRODUCT

Each vial contains 200 μ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Vav3 (F-11) is recommended for detection of Vav3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for Vav3 siRNA (h): sc-44187, Vav3 shRNA Plasmid (h): sc-44187-SH and Vav3 shRNA (h) Lentiviral Particles: sc-44187-V.

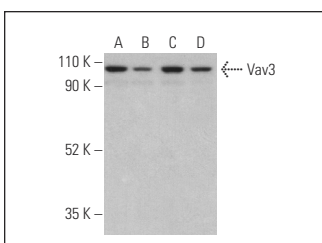
Molecular Weight of Vav3: 98 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HUV-EC-C whole cell lysate: sc-364180 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Vav3 (F-11): sc-518196. Western blot analysis of Vav3 expression in MCF7 (A), HUV-EC-C (B), MDA-MB-231 (C) and Jurkat (D) whole cell lysates. Detection reagent used: m-IgG κ BP-HRP: sc-516102.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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