

VAP-A (K-14): sc-48697

BACKGROUND

SNAREs are compartmentally specific, integral membrane proteins that are involved in the fusion of membranes and the transport of intracellular proteins. SNAREs are expressed at high levels in all cell types. VAMP-associated protein A (VAP-A) is a SNARE regulator with high levels of expression in the intestine during late embryogenesis and early neonatal development. VAP-A binds to a wide range of SNAREs and fusion-related proteins, including Syntaxin 1A, rBet1, rSec22, α SNAP and NSF. This suggests that VAP-A may play a more general role in SNARE-mediated vesicle traffic between the ER and Golgi in nonpolarized cells. VAP-A also mediates traffic in cell membranes and may play an important role in modulating intestinal smooth muscle cell differentiation. VAP-A and p48 interact to form a stable complex in mammalian cells.

REFERENCES

- Butler, K.L., et al. 1999. The chest radiograph in critically ill surgical patients is inaccurate in predicting ventilator-associated pneumonia. *Am. Surg.* 65: 805-810.
- Nishimura, Y., et al. 1999. Molecular cloning and characterization of mammalian homologues of vesicle-associated membrane protein-associated (VAMP-associated) proteins. *Biochem. Biophys. Res. Commun.* 254: 21-26.
- Weir, M.L., et al. 2001. VAP-A binds promiscuously to both v- and tSNAREs. *Biochem. Biophys. Res. Commun.* 286: 616-621.
- Wyles, J.P., et al. 2002. Vesicle-associated membrane protein-associated protein A (VAP-A) interacts with the oxy-sterol-binding protein to modify export from the endoplasmic reticulum. *J. Biol. Chem.* 277: 29908-29918.
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CHROMOSOMAL LOCATION

Genetic locus: VAPA (human) mapping to 18p11.22; Vapa (mouse) mapping to 17 E1.2.

SOURCE

VAP-A (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VAP-A of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-48697 P, (100 μ g 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

VAP-A (K-14) is recommended for detection of VAP-A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

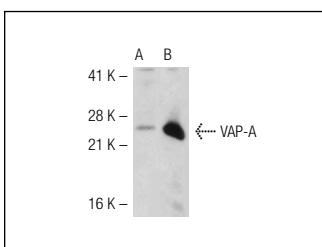
Suitable for use as control antibody for VAP-A siRNA (h): sc-61768, VAP-A siRNA (m): sc-61769, VAP-A shRNA Plasmid (h): sc-61768-SH, VAP-A shRNA Plasmid (m): sc-61769-SH, VAP-A shRNA (h) Lentiviral Particles: sc-61768-V and VAP-A shRNA (m) Lentiviral Particles: sc-61769-V.

Molecular Weight of VAP-A: 27 kDa.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



VAP-A (K-14): sc-48697. Western blot analysis of VAP-A expression in non-transfected: sc-117752 (A) and mouse VAP-A transfected: sc-124538 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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


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Try **VAP-A (4C12): sc-293278**, our highly recommended monoclonal alternative to VAP-A (K-14).