SANTA CRUZ BIOTECHNOLOGY, INC.

VAMP-4 (C-13): sc-48321

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Vesicle-associated membrane protein 4 (VAMP-4) belongs to a subfamily of the large SNARE family. VAMP-4 is distributed mainly in tubular and vesicular membranes of the *trans*-Golgi network, particularly in heart, brain and testis, but is found in almost all tissues. VAMP-4 interacts with small synaptic vesicles and clathrin-coated vesicles, participating in intracellular trafficking of secreted and membrane-associated proteins. It forms a complex with the TGN-trafficking protein syntaxin 6. VAMP-4 contains a dileucine motif which binds to the adaptor protein-1 (AP-1) subunit μ-1α. Phosphorylation-dependent binding of the molecule PACS-1 to AP-1 modulates the attachment of AP-1 to VAMP-4. VAMP-4 may contribute to risk for suicide attempt, possibly through alterations in neural conduction.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VAMP4 (human) mapping to 1q24.3; Vamp4 (mouse) mapping to 1 H2.1.

SOURCE

VAMP-4 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VAMP-4 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-48321 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VAMP-4 (C-13) is recommended for detection of VAMP-4 isoforms 1 and 2 of mouse 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).

VAMP-4 (C-13) is also recommended for detection of VAMP-4 isoforms 1 and 2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for VAMP-4 siRNA (h): sc-61766, VAMP-4 siRNA (m): sc-61767, VAMP-4 shRNA Plasmid (h): sc-61766-SH, VAMP-4 shRNA Plasmid (m): sc-61767-SH, VAMP-4 shRNA (h) Lentiviral Particles: sc-61766-V and VAMP-4 shRNA (m) Lentiviral Particles: sc-61767-V.

Molecular Weight of VAMP-4: 10 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) 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.

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.