

# VAP-B/C (K-16): sc-48702

## 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 proteins (VAPs) regulate the activity of SNAREs. VAP-B is a 243 amino acid protein, which consists of a conserved N-terminal domain, an  $\alpha$ -helical coiled-coil domain and a C-terminal transmembrane domain. VAP-C is a 99 amino acid protein that is a splice variant of VAP-B and retains the N-terminal 70 residues, but lacks both the coiled-coil and the transmembrane domains. Mutations in this "VAP-B/C" gene may result in amyotrophic lateral sclerosis, pinal muscular atrophy, progressive bulbar palsy or primary lateral sclerosis. These are all motor neuron diseases which belong to a group of neurodegenerative disorders involving the upper and/or lower motor neurons.

## CHROMOSOMAL LOCATION

Genetic locus: VAPB (human) mapping to 20q13.32; Vapb (mouse) mapping to 2 H4.

## SOURCE

VAP-B/C (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VAP-B/C of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-48702 P, (100  $\mu$ 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-B/C (K-16) is recommended for detection of VAP-B/C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VAP-B/C (K-16) is also recommended for detection of VAP-B/C in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VAP-B/C siRNA (h): sc-61770, VAP-B/C siRNA (m): sc-61771, VAP-B/C shRNA Plasmid (h): sc-61770-SH, VAP-B/C shRNA Plasmid (m): sc-61771-SH, VAP-B/C shRNA (h) Lentiviral Particles: sc-61770-V and VAP-B/C shRNA (m) Lentiviral Particles: sc-61771-V.

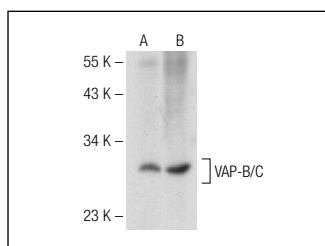
Molecular Weight of VAP-B/C: 27 kDa.

Positive Controls: mouse brain extract: sc-2253, mouse kidney extract: sc-2255 or mouse liver extract: sc-2256.

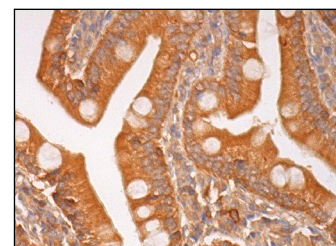
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



VAP-B/C (K-16): sc-48702. Western blot analysis of VAP-B/C expression in mouse brain (A) and mouse liver (B) tissue extracts.



VAP-B/C (K-16): sc-48702. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **VAP-B/C (1A2): sc-293364**, our highly recommended monoclonal alternative to VAP-B/C (K-16).