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 α-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, spinal 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.

REFERENCES


CHROMOSOMAL LOCATION

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

SOURCE

VAP-B/C (H-40) is a rabbit polyclonal antibody raised against amino acids 132-170 mapping within an internal region of VAP-B/C 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.

APPLICATIONS

VAP-B/C (H-40) is recommended for detection of VAP-B/C of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µl 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).

VAP-B/C (H-40) 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.

DATA

VAP-B/C (H-40): sc-98892. Western blot analysis of VAP-B/C expression in mouse kidney (A) and mouse liver (B) tissue extracts.

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.