SANTA CRUZ BIOTECHNOLOGY, INC.

Veli2 (A-20): sc-11502

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The Power to Question

BACKGROUND

Velis are a family of small synaptic proteins that interact with other proteins at the post-synaptic density (PSD) of neuronal synapses. Velis contain the PDZ motif involved in recruiting cell adhesion molecules, receptors and channels. Veli1 (also designated Lin-7A and MALS-1), Veli2 (also designated Lin-7B and MALS-2) and Veli3 (also designated Lin-7C and MALS-3) are mammalian homologs of *C. elegans* LIN-7. Veli proteins are ubiquitously expressed with high expression in brain, liver and testis. Velis are localized at the synaptic junctions in neurons. Velis bind to CASK, a neurexin-binding protein highly concentrated in synapses, and Mint1, a binding partner with a vesicle trafficking protein.

REFERENCES

1. Hata, Y., et al. 1996. CASK: a novel dlg/PSD95 homolog with an N-terminal calmodulin-dependent protein kinase domain identified by interaction with neurexins. J. Neurosci. 16: 2488-2494.
2. Okamoto, M., et al. 1997. Mints, Munc18-interacting proteins in synaptic vesicle exocytosis. J. Biol. Chem. 272: 31459-31464.
3. Hsueh, Y.P., et al. 1998. Direct interaction of CASK/LIN-2 and syndecan heparan sulfate proteoglycan and their overlapping distribution in neuronal synapses. J. Cell Biol. 142: 139-151.
4. Butz, S., et al. 1998. A tripartite protein complex with the potential to couple synaptic vesicle exocytosis to cell adhesion in brain. Cell 94: 773-782.
5. Irie, M., et al. 1999. Isolation and characterization of mammalian homologues of *Caenorhabditis elegans* lin-7: localization at cell-cell junctions. Oncogene 18: 2811-2817.
6. Jo, K., et al. 1999. Characterization of MALS/Velis-1, -2, and -3: a family of mammalian LIN-7 homologs enriched at brain synapses in association with the postsynaptic density-95/NMDA receptor postsynaptic complex. J. Neurosci. 19: 4189-4199.

CHROMOSOMAL LOCATION

Genetic locus: LIN7B (human) mapping to 19q13.33; Lin7b (mouse) mapping to 7 B4.

SOURCE

Veli2 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Veli2 of mouse 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-11502 P, (100 µg 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

Veli2 (A-20) is recommended for detection of Veli2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Veli2 (Y-19) is also recommended for detection of Veli2 in additional species, including canine, bovine and porcine.

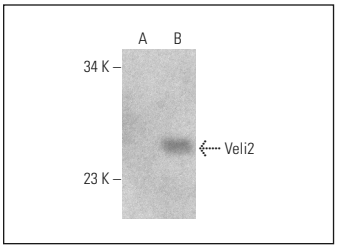
Suitable for use as control antibody for Veli2 siRNA (h): sc-42318, Veli2 siRNA (m): sc-42319, Veli2 shRNA Plasmid (h): sc-42318-SH, Veli2 shRNA Plasmid (m): sc-42319-SH, Veli2 shRNA (h) Lentiviral Particles: sc-42318-V and Veli2 shRNA (m) Lentiviral Particles: sc-42319-V.

Molecular Weight of Veli2: 25 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



Veli2 (A-20): sc-11502. Western blot analysis of Veli2 expression in non-transfected CHO (**A**) and mouse Veli2 transfected CHO (**B**) 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.