SANTA CRUZ BIOTECHNOLOGY, INC.

Lin-7Ba (R-13): sc-11501

SANTA CRUZ BIOTECHNOLOGY

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-7-B and MALS-1), Veli2 (also designated Lin-7A 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. Veli proteins have a molecular mass of 27-32 kDa, with Veli1 running at 32 kDa and Veli2 at 27 kDa. 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.

SOURCE

Lin-7Ba (R-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Lin-7Ba of rat 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-11501 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.

RESEARCH USE

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

APPLICATIONS

Lin-7Ba (R-13) is recommended for detection of Lin-7Ba of rat 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).

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.

PROTOCOLS

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