SANTA CRUZ BIOTECHNOLOGY, INC.

Cypin (h): 293T Lysate: sc-116517

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The assembly of neurotransmitter receptors and associated signal transduction machinery at synaptic sites involves postsynaptic density 95 (PSD-95) and related membrane-associated guanylate kinase (MAGUK) proteins. Cypin, (cytoplasmic PSD-95 interactor, also designated guanine deaminase and nedasin S), regulates intermediate steps in postsynaptic protein sorting, such as synaptic clustering of MAGUK, proteins and associates with multiple members of the PSD-95 family. Expressed both pre- and post-synaptically, Cypin is most prevalent within the cytoplasm of dendritic shafts and in the neck of synaptic spines. In non-neuronal cells, Cypin is most highly expressed in the basal membrane of intestinal epithelial cells. Cypin is also highly expressed in kidney, liver, lung, brain and spleen, with lower levels of expression in placenta, heart and skeletal muscle. Native Cypin may also be expressed as a dimer and a tetramer.

REFERENCES

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3. Brenman, J.E., Chao, D.S., Gee, S.H., McGee, A.W., Craven, S.E., Santillano, D.R., Huange, F., Xia, H., Peters, M.F., Froehner, S.C. and Bredt, D.S. 1996. Interaction of nitric oxide synthase with the postsynaptic density protein PSD-95 and α1-Syntrophin mediated by PDZ motifs. Cell 84: 757-767.
4. Yuan, G., Bin, J., McKay, D.J. and Snyder, F.F. 1999. Cloning and character-ization of human guanine deaminase. J. Biol. Chem. 274: 8175-8180.
5. Kuwahara, H., Araki, N., Makino, K., Masuko, N., Honda, S., Kaibuchi, K., Fukunaga, K., Miyamoto, El, Ogawa, M. and Saya, H. 1999. A novel NE-dlg/SAP 102-associated protein, p51-nedasin, related to the amido-hydrolase superfamily, interferes with the association between NE-dlg/SAP 102 and N-methyl-D-aspartate receptor. J. Biol. Chem. 274: 32204-32214.
6. Firestein, B., Brenmen, J., Aoki, C., Sanchez-Perez, A.M., El-Husseini, A.E. and Bredt, D.S. 1999. Cypin: a cytosolic regulator of PSD-95 postsynaptic targeting. Neuron 24: 659-672.

CHROMOSOMAL LOCATION

Genetic locus: GDA (human) mapping to 9q21.13.

PRODUCT

Cypin (h): 293T Lysate represents a lysate of human Cypin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Cypin (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Cypin antibodies. Recommended use: 10-20 µl per lane.

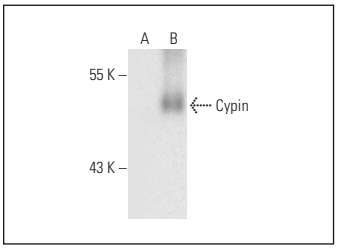
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cypin (D-7): sc-393571 is recommended as a positive control antibody for Western Blot analysis of enhanced human Cypin expression in Cypin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Cypin (D-7): sc-393571. Western blot analysis of Cypin expression in non-transfected: sc-117752 (**A**) and human Cypin transfected: sc-116517 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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