

Cypin (N-17): sc-11697

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 as a 50 kDa protein, 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 100 kDa dimer and a 200 kDa tetramer.

REFERENCES

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- Kornau, H.C., Schenker, L.T., Kennedy, M.B. and Seeburg, P.H. 1995. Domain interaction between NMDA receptor subunits and the postsynaptic density protein PSD-95. *Science* 269: 1737-1740.
- 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 Brettt, D.S. 1996. Interaction of nitric oxide synthase with the postsynaptic density protein PSD-95 and α -1 syntrophin mediated by PDZ motifs. *Cell* 84: 757-767.
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CHROMOSOMAL LOCATION

Genetic locus: GDA (human) mapping to 9q21.13; Gda (mouse) mapping to 19 B.

SOURCE

Cypin (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Cypin of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-11697 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Cypin (N-17) is recommended for detection of Cypin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Cypin (N-17) is also recommended for detection of Cypin in additional species, including bovine.

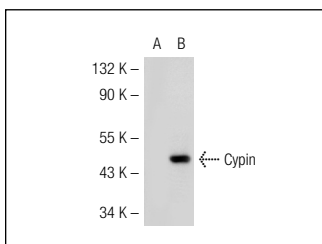
Suitable for use as control antibody for Cypin siRNA (h): sc-106853, Cypin siRNA (m): sc-142742, Cypin shRNA Plasmid (h): sc-106853-SH, Cypin shRNA Plasmid (m): sc-142742-SH, Cypin shRNA (h) Lentiviral Particles: sc-106853-V and Cypin shRNA (m) Lentiviral Particles: sc-142742-V.

Molecular Weight of Cypin: 50 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



Cypin (N-17): sc-11697. Western blot analysis of Cypin expression in non-transfected: sc-117752 (A) and human Cypin transfected: sc-116517 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.



Try **Cypin (D-7): sc-393571**, our highly recommended monoclonal alternative to Cypin (N-17).