

PSD-93 (H-300): sc-28942

BACKGROUND

The postsynaptic density protein (PSD)-93 and related membrane associated guanylate kinase (MAGUK) proteins assemble signal transduction complexes at sites of cell-cell contact including synapses. PSD-93 (also designated channel associated protein of synapse-110 or chapsyn-110) occurs only at postsynaptic sites in hippocampal neurons. PSD-95 and PSD-93 mediate ion channel clustering in heterologous cells and are believed to cluster and anchor NMDA receptors at the synapse. The glutamate receptor subunit, $\delta 2$, binds specifically to PSD-93, which is enriched in Purkinje neuron cell bodies and dendrites. In addition, PSD-93 clusters $\delta 2$ when they are co-expressed and they are co-localized at parallel fiber synapses.

REFERENCES

1. Brenman, J.E., Christopherson, K.S., Craven, S.E., McGee, A.W. and Bretz, D.S. 1996. Cloning and characterization of postsynaptic density 93, a nitric oxide synthase interacting protein. *J. Neurosci.* 16: 7407-7415.
2. Fukaya, M., Ueda, H., Yamauchi, K., Inoue, Y., and Watanabe, M. 1999. Distinct spatiotemporal expression of mRNAs for the PSD-95/SAP90 protein family in the mouse brain. *Neurosci. Res.* 33: 111-118.
3. Roche, K.W., Ly, C.D., Petralia, R.S., Wang, Y.X., McGee, A.W., Bretz, D.S. and Wenthold, R.J. 1999. Postsynaptic density-93 interacts with the δ glutamate receptor subunit at parallel fiber synapses. *J. Neurosci.* 19: 3926-3934.

SOURCE

PSD-93 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of PSD-93 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.

STORAGE

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

APPLICATIONS

PSD-93 (H-300) is recommended for detection of PSD-93, PSD-95, SAP97, SAP102 and PSD-95 related protein 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).

PSD-93 (H-300) is also recommended for detection of PSD-93, PSD-95, SAP97, SAP102 and PSD-95 related protein in additional species, including equine and canine.

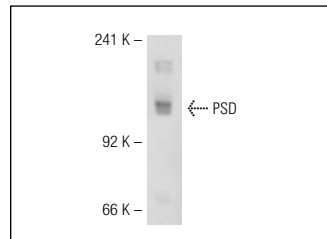
Molecular Weight of PSD-93: 117 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

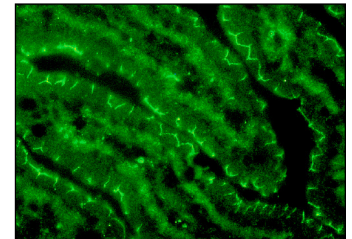
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PSD-93 (H-300): sc-28942. Western blot analysis of PSD-93 expression in HeLa whole cell lysate.



PSD-93 (H-300): sc-28942. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining.

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.

MONOS
Satisfaction
Guaranteed

Try **PSD-93 (A-6): sc-515252** or **PSD-93 (D-2): sc-515245**, our highly recommended monoclonal alternatives to PSD-93 (H-300).