SANTA CRUZ BIOTECHNOLOGY, INC.

PSD-95 (H-40): sc-28941

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Membrane-associated guanylate kinase (MAGUK) family members function as molecular scaffolds for the assembly of multiprotein complexes localizing to the plasma membrane. Several mammalian proteins related to the *Drosophila* tumor suppressor discs-large (dlg) gene product belong to the MAGUK family. MAGUK family members include the postsynaptic proteins PSD-93, PalS1, PSD-95 (SAP 90), densin-180, NE-dlg (SAP 120), dlg-1 (SAP 97), GKAP (GK-associated protein), p55, the tight junction associated proteins ZO-1-3 and the caspase-associated recruitment domain (CARD) proteins CARD11 and CARD14. Membrane-associated guanylate kinase inverted (MAGI) proteins MAGI-1-3 share a high degree of similarity with MAGUK proteins.

REFERENCES

1. Gateff, E., et al. 1989. Tumor-suppressor genes of *Drosophila melanogaster.* Crit. Rev. Oncog. 1: 221-245.
2. Cho, K.O., et al. 1992. The rat brain postsynaptic density fraction contains a homolog of the *Drosophila* discs-large tumor suppressor protein. Neuron 9: 929-942.

CHROMOSOMAL LOCATION

Genetic locus: DLG4 (human) mapping to 17p13.1; Dlg4 (mouse) mapping to 11 B3.

SOURCE

PSD-95 (H-40) is a rabbit polyclonal antibody raised against amino acids 1-40 mapping at the N-terminus of PSD-95 of human origin.

PRODUCT

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

APPLICATIONS

PSD-95 (H-40) is recommended for detection of PSD-95 of mouse 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).

PSD-95 (H-40) is also recommended for detection of PSD-95 in additional species, including canine and porcine.

Suitable for use as control antibody for PSD-95 siRNA (h): sc-42010, PSD-95 siRNA (m): sc-42012, PSD-95 shRNA Plasmid (h): sc-42010-SH, PSD-95 shRNA Plasmid (m): sc-42012-SH, PSD-95 shRNA (h) Lentiviral Particles: sc-42010-V and PSD-95 shRNA (m) Lentiviral Particles: sc-42012-V.

Molecular Weight of PSD-95: 95 kDa.

Positive Controls: mouse brain extract: sc-2253.

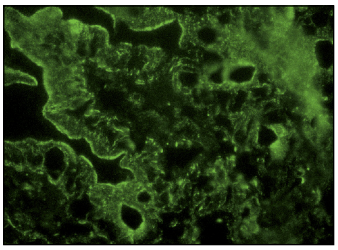
RESEARCH USE

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

STORAGE

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

DATA



PSD-95 (H-40): sc-28941. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining.

SELECT PRODUCT CITATIONS

1. Wu, L.X., et al. 2007. Involvement of the Snk-SPAR pathway in Glutamate-induced excitotoxicity in cultured hippocampal neurons. Brain Res. 1168: 38-45.
2. Prisila Dulcy, C., et al. 2012. Standardized extract of *Bacopa monniera* (BESEB CDRI-08) attenuates contextual associative learning deficits in the aging rat's brain induced by D-galactose. J. Neurosci. Res. 90: 2053-2064.
3. Preethi, J., et al. 2012. Participation of microRNA 124-CREB pathway: a parallel memory enhancing mechanism of standardised extract of *Bacopa monniera* (BESEB CDRI-08). Neurochem. Res. 37: 2167-2177.
4. Zhang, H.J., et al. 2012. ATPA induced GluR5-containing kainite receptor S-nitrosylation via activation of GluR5-G_q-PLC-IP(3)R pathway and signalling module GluR5·PSD-95·nNOS. Int. J. Biochem. Cell Biol. 44: 2261-2271.
5. Mukilan, M., et al. 2015. Activity-dependent expression of miR-132 regulates immediate-early gene induction during olfactory learning in the greater short-nosed fruit bat, *Cynopterus sphinx*. Neurobiol. Learn. Mem. 120: 41-51.
6. De La Rosa-Prieto, C., et al. 2015. Olfactory and cortical projections to bulbar and hippocampal adult-born neurons. Front. Neuroanat. 9: 4.

PROTOCOLS

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