SANTA CRUZ BIOTECHNOLOGY, INC.

PSD-93 (N-20): sc-12233



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, δ 2, binds specifically to PSD-93, which is enriched in Purkinje neuron cell bodies and dendrites. In addition, PSD-93 clusters δ 2 when they are coexpressed and they are colocalized at parallel fiber synapses.

CHROMOSOMAL LOCATION

Genetic locus: DLG2 (human) mapping to 11q14.1; Dlgh2 (mouse) mapping to 7 E1.

SOURCE

PSD-93 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PSD-93 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-12233 P, (100 μ g 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.

APPLICATIONS

PSD-93 (N-20) is recommended for detection of PSD-93 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), immunohistochemistry (including paraffin-embedded sections) (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 (N-20) is also recommended for detection of PSD-93 in additional species, including equine, bovine and avian.

Suitable for use as control antibody for PSD-93 siRNA (h): sc-36321, PSD-93 siRNA (m): sc-36322, PSD-93 shRNA Plasmid (h): sc-36321-SH, PSD-93 shRNA Plasmid (m): sc-36322-SH, PSD-93 shRNA (h) Lentiviral Particles: sc-36321-V and PSD-93 shRNA (m) Lentiviral Particles: sc-36322-V.

Molecular Weight of PSD-93: 117 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, IMR-32 cell lysate: sc-2409 or HeLa whole cell lysate: sc-2200.

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. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA





PSD-93 (N-20): sc-12233. Western blot analysis of PSD-93 expression in SK-N-SH (A), IMR-32 (B) and HeLa $({\bm C})$ whole cell lysates.

PSD-93 (N-20): sc-12233. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing membrane and cytoplasmic staining of cells in molecular layer and cytoplasmic staining of cells in granular layer and Purkinje cells.

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 Satisfation Guaranteed

Try PSD-93 (A-6): sc-515252 or PSD-93 (D-2): sc-515245, our highly recommended monoclonal alternatives to PSD-93 (N-20).