BACKGROUN

The sub-membranous region at the postsynaptic membrane contains a number of proteins critical for receptor targeting. Gephyrin is a microtubule-associated protein highly expressed in brain and localized to neuronal postsynaptic membranes. Gephyrin is essential for the postsynaptic localization of the inhibitory Glycinereceptor and is thought to anchor the receptor to subsynaptic microtubules. The protein is expressed in most mammalian tissues with predominant expression in brain. At least five additional splice variants of Gephyrin ranging in molecular weight have been identified in rat and human brain tissue.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: GPHN (human) mapping to 14q23.3; Gphn (mouse) mapping to 12 C3.

SOURCE

Gephyrin (G-6) is a mouse monoclonal antibody raised against amino acids 437-736 of Gephyrin of human origin.

PRODUCT

Each vial contains 200 µg IgG2b in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Gephyrin (G-6) is recommended for detection of Gephyrin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), 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), immunohistochemistry (including paraaffin-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).

Suitable for use as control antibody for Gephyrin siRNA (h): sc-35464, Gephyrin siRNA (m): sc-35465, Gephyrin shRNA Plasmid (h): sc-35464-SH, Gephyrin shRNA Plasmid (m): sc-35465-SH, Gephyrin shRNA (h) Lentiviral Particles: sc-35464-V and Gephyrin shRNA (m) Lentiviral Particles: sc-35465-V.

Molecular Weight of Gephyrin: 93 kDa.

Positive Controls: 3611-RF whole cell lysate: sc-2215, HeLa whole cell lysate: sc-2200 or NCI-H460 whole cell lysate: sc-36-235.

DATA

Gephyrin (G-6): sc-25311. Western blot analysis of Gephyrin expression in HeLa (A), 3611-RF (B) and NCI-H460 (C) whole cell lysates and human brain tissue extract (D).

SELECT PRODUCT CITATIONS


STORAGE

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

PROTOCOLS

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