

Gephyrin

Cat.No. 147 111BT; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized, biotin-labeled. . For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 up to 1 : 5000 IP: yes ICC: 1 : 500 up to 1 : 1000 IHC: yes , methanol-acetone fixation IHC-P/FFPE: not tested yet ELISA: yes
Label	biotin
Clone	3B11
Subtype	IgG1 (κ light chain)
Immunogen	Recombinant protein corresponding to AA 307 to 735 from rat Gephyrin (UniProt Id: Q03555)
Epitop	Epitop: AA 326 to 550 from rat Gephyrin (UniProt Id: Q03555)
Reactivity	Reacts with: human (Q9NQX3), rat (Q03555), mouse (Q8BUV3), zebrafish. Other species not tested yet.
Specificity	Detects all splice variants that contain a complete E-domain including the C6 domain. (K.O. verified)
Remarks	This antibody is highly recommended for Western blot experiments and immunoprecipitation.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Gephyrin is a bifunctional protein which is essential for both synaptic clustering of inhibitory neurotransmitter receptors in the central nervous system and the biosynthesis of the molybdenum cofactor (MoCo) in peripheral tissues. It co-purifies with the inhibitory glycine receptor (GlyR) and is expressed abundantly in all brain areas which contain synapses.

Selected References SYSY Antibodies

IgSF9b regulates anxiety behaviors through effects on centromedial amygdala inhibitory synapses.
Babaev O, Cruces-Solis H, Piletti Chatain C, Hammer M, Wenger S, Ali H, Karalis N, de Hoz L, Schlüter OM, Yanagawa Y, Ehrenreich H, et al.
Nature communications (2018) 9(1): 5400. **IHC; tested species: mouse**

Selected General References

Identification of multiple gephyrin variants in different organs of the adult rat.
Hermann A, Kneussel M, Betz H
Biochemical and biophysical research communications (2001) 282(1): 67-70.

Widespread expression of gephyrin, a putative glycine receptor-tubulin linker protein, in rat brain.
Kirsch J, Betz H
Brain research (1993) 621(2): 301-10.

Distribution of gephyrin transcripts in the adult and developing rat brain.
Kirsch J, Malosio ML, Wolters I, Betz H
The European journal of neuroscience (1993) 5(9): 1109-17.