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Anti-Gephyrin Rabbit Monoclonal Antibody

Catalog # ABO15298

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	Q9NQX3
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Gephyrin Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	10243
Other Names	Gephyrin, Molybdopterin adenylyltransferase, MPT adenylyltransferase, 2.7.7.75, Domain G, Molybdopterin molybdenumtransferase, MPT Mo-transferase, 2.10.1.1, Domain E, GPHN (HGNC:15465), GPH, KIAA1385
Calculated MW	79748
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 18G74
Immunogen	A synthesized peptide derived from human Gephyrin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	GPHN (HGNC:15465)
Synonyms	GPH, KIAA1385

Function

Microtubule-associated protein involved in membrane protein- cytoskeleton interactions. It is thought to anchor the inhibitory glycine receptor (GLYR) to subsynaptic microtubules (By similarity). Acts as a major instructive molecule at inhibitory synapses, where it also clusters GABA type A receptors (PubMed:25025157, PubMed:26613940).

Cellular Location

Postsynaptic cell membrane; Lipid- anchor; Cytoplasmic side. Cell membrane {ECO:0000250|UniProtKB:Q03555}; Lipid-anchor {ECO:0000250|UniProtKB:Q03555}; Cytoplasmic side {ECO:0000250|UniProtKB:Q03555}. Cytoplasm, cytosol. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q03555}. Cell projection, dendrite. Postsynaptic density {ECO:0000250|UniProtKB:Q8BUV3}. Note=Cytoplasmic face of glycinergic postsynaptic membranes (By similarity). Forms clusters at synapses (PubMed:25025157). {ECO:0000250|UniProtKB:Q03555, ECO:0000269|PubMed:25025157}

Images

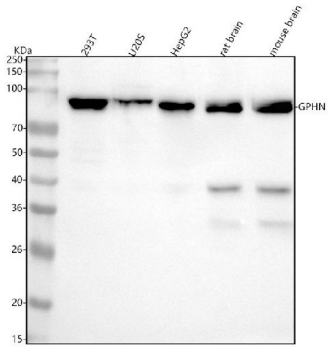


Figure 1. Western blot analysis of Gephyrin using anti-Gephyrin antibody (M04560-3).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human 293T whole cell lysates,
Lane 2: human U20S whole cell lysates,
Lane 3: human HepG2 whole cell lysates,
Lane 4: rat brain tissue lysates,
Lane 5: mouse brain tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Gephyrin antigen affinity purified monoclonal antibody (Catalog # M04560-3) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Gephyrin at approximately 93 kDa. The expected band size for Gephyrin is at 80 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.