



Anti-Gephyrin Antibody

Alternative Names: GEPH, GPH, GPHRYN, HKPX1, MOCODC, GPHN, Molybdopterin adenyltransferase, Molybdopterin molybdenumtransferase

Catalogue Number: AB19-10099-50ug

Size: 50 µg

Background Information

Gephyrin is a 93-kDa protein that was initially identified as a tubulin-binding molecule that co-purifies with GlyRs (Glycine Receptors). It is highly expressed in brain tissues, localising to neuronal postsynaptic membranes and is essential for postsynaptic localisation of inhibitory GlyRs and GABA-ARs (GABA-A Receptors). It is thought to anchor the receptors to subsynaptic microtubules.

In vertebrates gephyrin has an N-terminal G-domain and a C-terminal E-domain connected by a central linker region or C-domain. At least five splice variants of Gephyrin have been identified in rat and human brain tissue covering a range of molecular weights.

An accumulation of gephyrin within Beta-amyloid plaques due to a shift in its solubility, has been seen in Alzheimer's disease with an accumulation of a lower molecular weight isoform (a product of gephyrin cleavage), and a reduced amount of the full length gephyrin.

Gephyrin is also required for molybdenum cofactor biosynthesis (in all tissues) and mutations in the Gephyrin gene may be associated with the neurological condition hyperplexia and molybdenum cofactor deficiency.

Product Information

Antibody Type:	Polyclonal	Host:	Rabbit
Isotype:	IgG	Species Reactivity:	Human, Mouse, Rat
Immunogen:	A synthetic peptide from the C-terminal region identical in human and rat Gephyrin		
Format:	50 µg in 50 µl PBS with 0.03% Proclin300, 50% glycerol, pH7.3.		
Storage Conditions:	Store at -20°C. Avoid freeze / thaw cycles.		
Applications:	IHC IHC 1:50-200.		

Additional Information

Subcellular location:	Cytoplasm	MW:	83/80kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	64845	Uniprot ID:	Q03555