



Anti-Gephyrin Antibody

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

Catalogue Number: AB19-10099-100ug

Size: 100 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

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| 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: | 100 µg in 100 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

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| 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 |