

# Rabbit Anti-Gephyrin antibody

# SL6644R

<b>Product Name:</b>	Gephyrin
Chinese Name:	桥尾蛋白抗体
Alias:	Domain E; Domain G; GEPH; GEPH_HUMAN; GPH; GPHN; GPHRYN; Molybdopterin molybdenumtransferase; MPT adenylyltransferase; MPT Motransferase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	83kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Gephyrin:231-330/736
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The sub-membraneous 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 glycine receptor 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.

## **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). Catalyzes two steps in the biosynthesis of the molybdenum cofactor. In the first step, molybdopterin is adenylated. Subsequently, molybdate is inserted into adenylated molybdopterin and AMP is released.

# Subunit:

Homotrimer. Interacts with GABARAP (By similarity).

## **Subcellular Location:**

Cell junction, synapse (By similarity). Cell junction, synapse, postsynaptic cell membrane; Peripheral membrane protein; Cytoplasmic side (By similarity). Cytoplasm, cytoskeleton (By similarity). Note=Cytoplasmic face of glycinergic postsynaptic membranes (By similarity).

#### **DISEASE:**

Defects in GPHN are the cause of molybdenum cofactor deficiency type C (MOCOD type C) [MIM:252150]. MOCOD type C is an autosomal recessive disease which leads to the pleiotropic loss of all molybdoenzyme activities and is characterized by severe neurological damage, neonatal seizures and early childhood death.

# Similarity:

In the N-terminal section; belongs to the moaB/mog family. In the C-terminal section; belongs to the moeA family.

## SWISS:

O9NOX3

# Gene ID:

10243

## Database links:

Entrez Gene: 10243Human

Entrez Gene: 268566Mouse

Entrez Gene: 64845Rat

Omim: 603930Human

SwissProt: Q9NQX3Human

SwissProt: Q8BUV3Mouse

SwissProt: Q03555Rat

Unigene: 208765Human

Unigene: 341742Mouse

Unigene: 363753 Mouse

Unigene: 453131 Mouse

Unigene: 11032Rat

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

	180 — 130 —
	95 — Gephyrin
Picture:	53
	40 —
	Sample:
	Lung (Mouse) Lysate at 40 ug  Primary: Anti- Gephyrin (SL6644R) at 1/1000 dilution
	Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
	Predicted band size: 83 kD

Observed band size: 83 kD

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