

For Research Use Only

# Gephyrin/GPHN Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 87903-2-PBS



## Basic Information

<b>Catalog Number:</b> 87903-2-PBS	<b>GenBank Accession Number:</b> BC030016	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 10243	<b>CloneNo.:</b> 260132F4
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> Q9NQX3	
<b>Immunogen Catalog Number:</b> AG3370	<b>Full Name:</b> gephyrin	
	<b>Calculated MW:</b> 769 aa, 83 kDa	
	<b>Observed MW:</b> 93 kDa	

## Applications

**Tested Applications:**  
WB, Sandwich ELISA, Indirect ELISA

**Species Specificity:**  
human

## Background Information

Gephyrin (GPHN) is an organizational protein that clusters and localizes the inhibitory glycine receptor (GlyR) and GABAA receptors to the microtubular matrix of the neuronal postsynaptic membrane. Mice deficient in gephyrin develop a hereditary molybdenum cofactor deficiency and a neurological phenotype that mimics startle disease (hyperekplexia). In non-neuronal tissues, the encoded protein is also required for molybdenum cofactor biosynthesis. Two isoforms produced by alternative splicing have been described. The observed MW of Gephyrin is 93 kDa, larger than the predicted of 83 kDa, which may be due to the modifications on various phosphorylation sites.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

For technical support and original validation data for this product please contact:

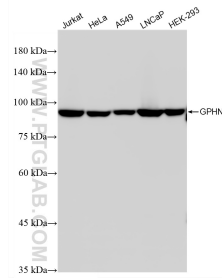
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

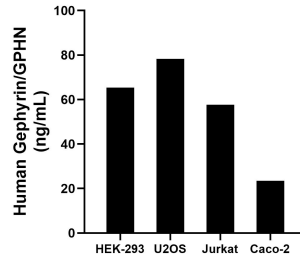
W: [ptgcn.com](http://ptgcn.com)

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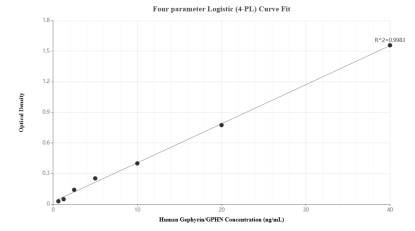
## Selected Validation Data



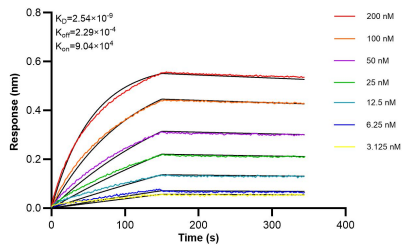
Various lysates were subjected to SDS PAGE followed by western blot with 87903-2-RR (GPHN antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87903-2-PBS in a different storage buffer formulation.



The mean Gephyrin/GPHN concentration was determined to be 65.42 ng/mL in HEK-293 cell extract based on a 1.5 mg/mL extract load, 78.35 ng/mL in U2OS cell extract based on a 1.5 mg/mL extract load, 57.56 ng/mL in Jurkat cell extract based on a 1.2 mg/mL extract load and 23.56 ng/mL in Caco-2 cell extract based on a 1.2 mg/mL extract load.



Sandwich ELISA standard curve of MP03251-2, Human Gephyrin/GPHN Recombinant Matched Antibody Pair - PBS only. 87903-5-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag3370. 87903-2-PBS was HRP conjugated as the detection antibody. Range: 0.781-40 ng/mL



Biolayer interferometry (BLI) kinetic assays of 87903-2-RR against Human Gephyrin/GPHN were performed. The affinity constant is 2.54 nM.