gephyrin Polyclonal antibody

Catalog Number:**12681-1-AP**   **6 Publications**

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Basic Information

Catalog Number:
12681-1-AP

Size:
150ul , Concentration: 800 ug/ml by Nanodrop and 273 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3370

GenBank Accession Number:
BC030016

GeneID (NCBI):
10243

UNIPROT ID:
Q9NQX3

Full Name:
gephyrin

Calculated MW:
769 aa, 83 kDa

Observed MW:
93 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF/ICC 1:20-1:200

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IF

Species Specificity:
human, mouse, rat

Cited Species:
mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:
WB : HEK-293 cells, Jurkat cells
IP : HEK-293 cells,
IHC : rat brain tissue,
IF/ICC : HEK-293 cells,

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 predicated of 83 kDa, which may be due to the modifications on various phosphorylation sites.

Notable Publications

Author	Pubmed ID	Journal	Application
Jian Meng	35606143	J Neurosci	WB
Xiaoxiang Tan	36608926	Neurosci Lett	WB
Jian Du	39071865	Adv Funct Mater	IF

Storage

Storage:
Store at -20℃. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

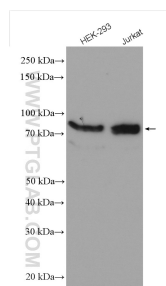Various lysates were subjected to SDS PAGE followed by western blot with 12681-1-AP (gephyrin antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.
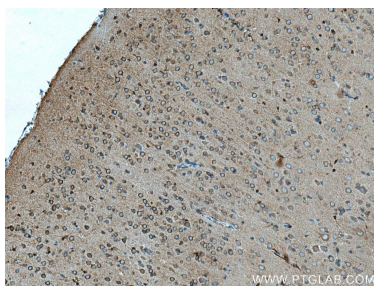

Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 12681-1-AP (gephyrin antibody) at dilution of 1:200 (under 10× lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).
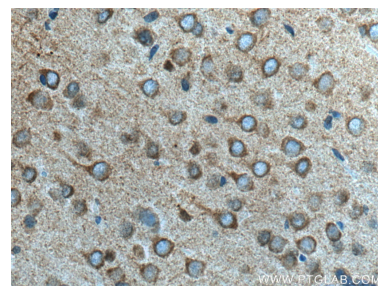
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 12681-1-AP (gephyrin antibody) at dilution of 1:200 (under 40× lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).
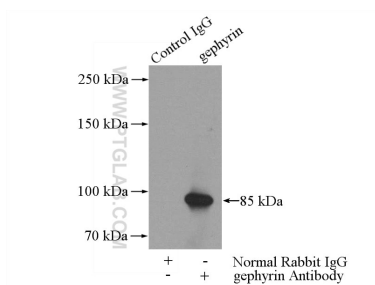
IP result of anti-gephyrin (IP:12681-1-AP, 4ug; Detection:12681-1-AP 1:700) with HEK-293 cells lysate 3200ug.
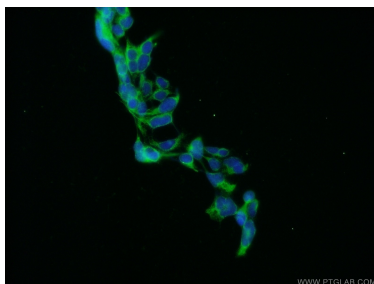
Immunofluorescent analysis of HEK-293 cells using 12681-1-AP (gephyrin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).