

Product datasheet

Anti-Gephyrin antibody [2C2] ab124385

[4 Images](#)

Overview

Product name	Anti-Gephyrin antibody [2C2]
Description	Mouse monoclonal [2C2] to Gephyrin
Host species	Mouse
Tested applications	Suitable for: WB, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length Gephyrin produced in HEK293T cells (NP_065857).
Positive control	HEK293T cells transfected with pCMV6-ENTRY Gephyrin cDNA; HeLa cell extracts; COS7 cells; HEK293T cells transfected with pCMV6-ENTRY Gephyrin overexpress plasmid.
General notes	Dilute in PBS (pH7.3) before use.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 48% PBS, 50% Glycerol, 1% BSA
Purity	Protein A purified
Purification notes	ab124385 is purified from Mouse ascites fluid by affinity chromatography.
Clonality	Monoclonal
Clone number	2C2
Isotype	IgG2a

Applications

Our [Abpromise guarantee](#) covers the use of **ab124385** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/2000. Predicted molecular weight: 80 kDa.
Flow Cyt		1/100. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
ICC/IF		1/100.

Target

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.

Pathway Cofactor biosynthesis; molybdopterin biosynthesis.

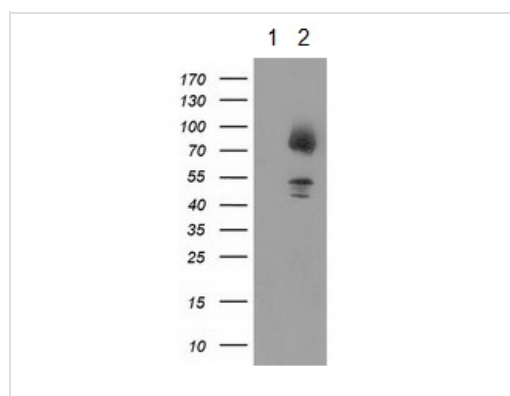
Involvement in disease Defects in GPHN are the cause of molybdenum cofactor deficiency type C (MOCOD type C) [MIM:252150]. MOCOD type C is an autosomal recessive disease which leads to the pleiotropic loss of all molybdoenzyme activities and is characterized by severe neurological damage, neonatal seizures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

Defects in GPHN are a cause of startle disease (STHE) [MIM:149400]; also known as hyperekplexia. STHE is a genetically heterogeneous neurologic disorder characterized by muscular rigidity of central nervous system origin, particularly in the neonatal period, and by an exaggerated startle response to unexpected acoustic or tactile stimuli.

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

Cellular localization Cell junction > synapse. Cell junction > synapse > postsynaptic cell membrane. Cytoplasm > cytoskeleton. Cytoplasmic face of glycinergic postsynaptic membranes.

Images



Western blot - Anti-Gephyrin antibody [2C2] (ab124385)

All lanes : Anti-Gephyrin antibody [2C2] (ab124385) at 1/500 dilution

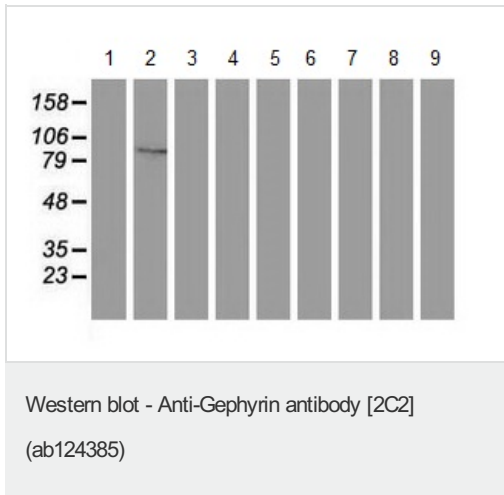
Lane 1 : HEK293T cells transfected with pCMV6-ENTRY control cDNA

Lane 2 : HEK293T cells transfected with pCMV6-ENTRY Gephyrin cDNA

Lysates/proteins at 5 µg per lane.

Predicted band size: 80 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC205986)



All lanes : Anti-Gephyrin antibody [2C2] (ab124385) at 1/500 dilution

Lane 1 : HepG2 cell extract

Lane 2 : HeLa cell extract

Lane 3 : HT29 cell extract

Lane 4 : A549 cell extract

Lane 5 : COS7 cell extract

Lane 6 : Jurkat cell extract

Lane 7 : MDCK cell extract

Lane 8 : PC12 cell extract

Lane 9 : MCF7 cell extract

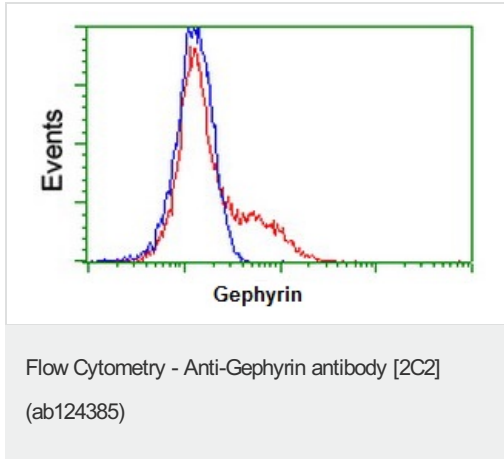
Lysates/proteins at 35 µg per lane.

Predicted band size: 80 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC205986)



ab124385, at 1/100 dilution, staining Gephyrin in COS7 cells transiently transfected by pCMV6-ENTRY Gephyrin by Immunofluorescence.



ab124385, at 1/100 dilution staining Gephyrin in HEK293T cells transfected with either pCMV6-ENTRY Gephyrin overexpress plasmid (Red) or empty vector control plasmid (Blue) by flow cytometry.

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