abcam

Product datasheet

Anti-Gephyrin antibody [EPR12650] ab181382

KO 評価済 リコンビナント RabMAb

3 Abreviews 1 References 画像数 6

製品の概要

製品名	Anti-Gephyrin antibody [EPR12650]
製品の詳細	Rabbit monoclonal [EPR12650] to Gephyrin
由来種	Rabbit
特異性	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
アプリケーション	**適用あり:** IHC-P, WB **適用なし:** ICC/IF
種交差性	**交差種:** Mouse, Rat, Human **交差が予測される動物種:** Chicken, Cow, Dog, Pig, Zebrafish, Rhesus monkey, Xenopus tropicalis
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HEK-293, Mouse heart, Fetal brain, SH-SY5Y, Neuro-2a, HAP1, MCF7, U2OS, and C6 lysates; IHC-P: Human kidney and brain tissue.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR12650
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab181382の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★★ (3)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
WB		1/1000 - 1/5000. Detects a band of approximately 93 kDa (predicted molecular weight: 80 kDa).

追加情報 Is unsuitable for ICC/IF.

ターゲット情報

機能 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.

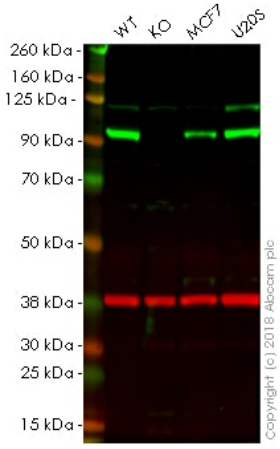
パスウェイ Cofactor biosynthesis; molybdopterin biosynthesis.

関連疾患 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.

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

細胞内局在 Cell junction > synapse. Cell junction > synapse > postsynaptic cell membrane. Cytoplasm > cytoskeleton. Cytoplasmic face of glycinergic postsynaptic membranes.

画像



Western blot - Anti-Gephyrin antibody [EPR12650] (ab181382)

All lanes : Anti-Gephyrin antibody [EPR12650] (ab181382) at 1 µg/ml (unpurified)

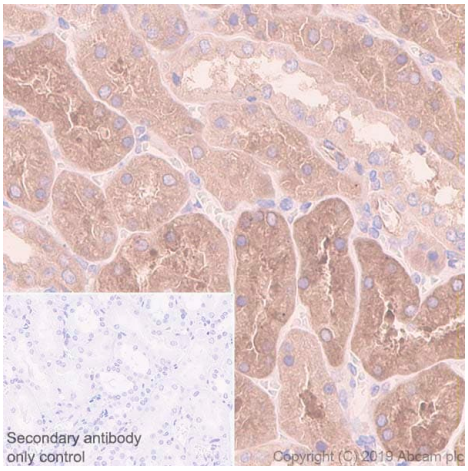
Lane 1 : Wild-type HAP1 whole cell lysate
Lane 2 : GPHN (Gephyrin) knockout HAP1 whole cell lysate
Lane 3 : MCF7 whole cell lysate
Lane 4 : U2OS whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 80 kDa

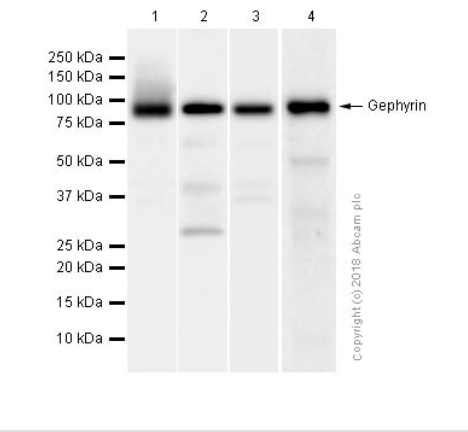
Lanes 1 - 4: Merged signal (red and green). Green - ab181382 observed at 90 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab181382 was shown to recognize Gephyrin in wild-type HAP1 cells as signal was lost at the expected MW in GPHN (Gephyrin) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and GPHN (Gephyrin) knockout samples were subjected to SDS-PAGE. Ab181382 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Gephyrin antibody [EPR12650] (ab181382)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling Gephyrin with purified ab181382 at 1/100 dilution (1.62 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Gephyrin antibody [EPR12650] (ab181382)

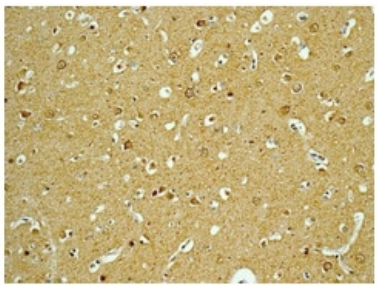
All lanes : Anti-Gephyrin antibody [EPR12650] (ab181382) at 1/1000 dilution (Purified)

Lane 1 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates
Lane 2 : Mouse heart lysates
Lane 3 : Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysates
Lane 4 : C6 (Rat glial tumor glial cell) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

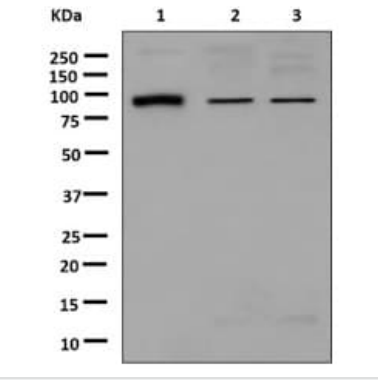
Predicted band size: 80 kDa
Observed band size: 93 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Gephyrin antibody [EPR12650] (ab181382)

Immunohistochemical analysis of parafiin embedded human brain tissue using ab181382 (unpurified).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Gephyrin antibody [EPR12650] (ab181382)

All lanes : Anti-Gephyrin antibody [EPR12650] (ab181382) at 1/1000 dilution (unpurified)

Lane 1 : Fetal brain tissue lysate
Lane 2 : 293T cell lysate
Lane 3 : SH-SY5Y cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 80 kDa

Anti-Gephyrin antibody [EPR12650] (ab181382)

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