

Anti-NMDAR1 antibody [EPR2481(2)] ab109182

KO 評価済 リコンビナント RabMAb

★★★★☆ 4 Abreviews 58 References 画像数 7

製品の概要

製品名	Anti-NMDAR1 antibody [EPR2481(2)]
製品の詳細	Rabbit monoclonal [EPR2481(2)] to NMDAR1
由来種	Rabbit
アプリケーション	適用あり: WB, ICC/IF 適用なし: IHC-P
種交差性	交差種: Mouse, Rat, Human
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	Fetal brain cell lysate. ICC/IF: Mouse primary neuron cells
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 -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 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	EPR2481(2)
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ab109182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。

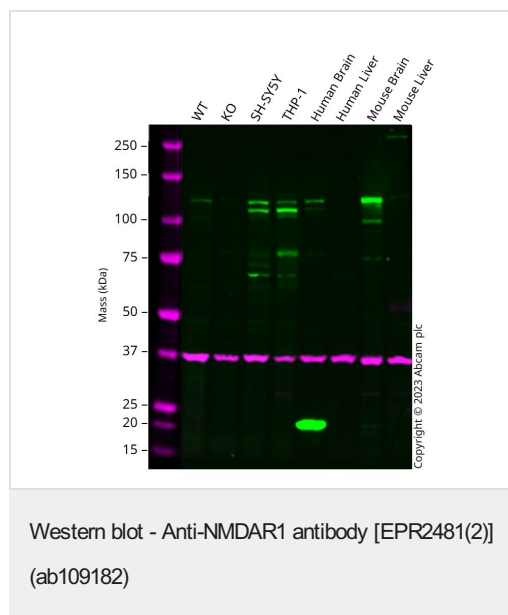
アプリケーション	Abreviews	特記事項
WB	★★★★☆ (4)	1/1000 - 1/10000. Detects a band of approximately 120 kDa (predicted molecular weight: 105 kDa).
ICC/IF		1/50.

追加情報 Is unsuitable for IHC-P.

ターゲット情報

機能	NMDA receptor subtype of glutamate-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine. This protein plays a key role in synaptic plasticity, synaptogenesis, excitotoxicity, memory acquisition and learning. It mediates neuronal functions in glutamate neurotransmission. Is involved in the cell surface targeting of NMDA receptors.
配列類似性	Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR1/GRIN1 subfamily.
翻訳後修飾	NMDA is probably regulated by C-terminal phosphorylation of an isoform of NR1 by PKC. Dephosphorylated on Ser-897 probably by protein phosphatase 2A (PPP2CB). Its phosphorylated state is influenced by the formation of the NMDAR-PPP2CB complex and the NMDAR channel activity.
細胞内局在	Cell membrane. Cell junction > synapse > postsynaptic cell membrane. Cell junction > synapse > postsynaptic cell membrane > postsynaptic density. Enriched in post-synaptic plasma membrane and post-synaptic densities.

画像



All lanes : Anti-NMDAR1 antibody [EPR2481(2)] (ab109182) at 1/1000 dilution

- Lane 1 :** Wild-type Neuro-2a cell lysate
- Lane 2 :** GRIN1 knockout Neuro-2a cell lysate
- Lane 3 :** SH-SY5Y UNBOILED cell lysate
- Lane 4 :** THP-1 UNBOILED cell lysate
- Lane 5 :** Human Brain UNBOILED cell lysate
- Lane 6 :** Human Liver UNBOILED cell lysate
- Lane 7 :** Mouse Brain UNBOILED cell lysate
- Lane 8 :** Mouse Liver UNBOILED cell lysate

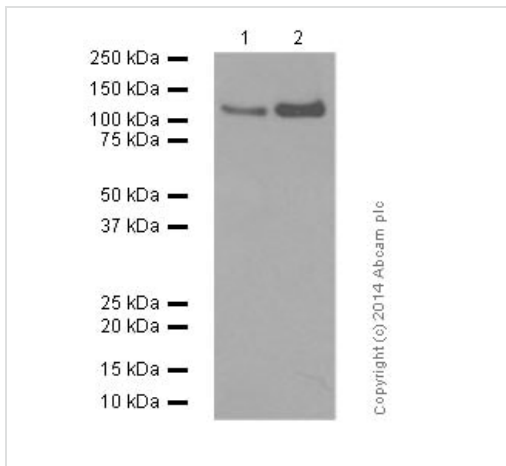
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 105 kDa

Observed band size: 120 kDa

Western blot: Anti-GRIN1 antibody [EPR2481(2)] (ab109182) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab109182 was shown to bind specifically to GRIN1. A band was observed at 120 kDa in wild-type Neuro-2a cell lysates with no signal observed at this size in GRIN1 knockout cell line [ab281960](#) (knockout cell lysate [ab282987](#)). To generate this image, wild-type and GRIN1 knockout Neuro-2a cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-NMDAR1 antibody [EPR2481(2)] (ab109182)

All lanes : Anti-NMDAR1 antibody [EPR2481(2)] (ab109182) at 1/5000 dilution (purified)

Lane 1 : Mouse brain tissue lysate

Lane 2 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

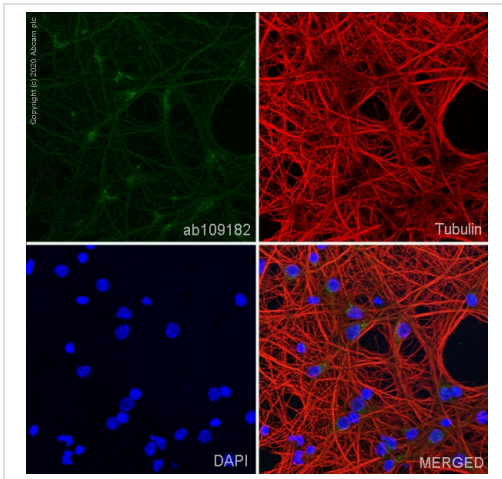
All lanes : HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 105 kDa

Observed band size: 120 kDa

Blocking buffer: 5% NFDM/TBST

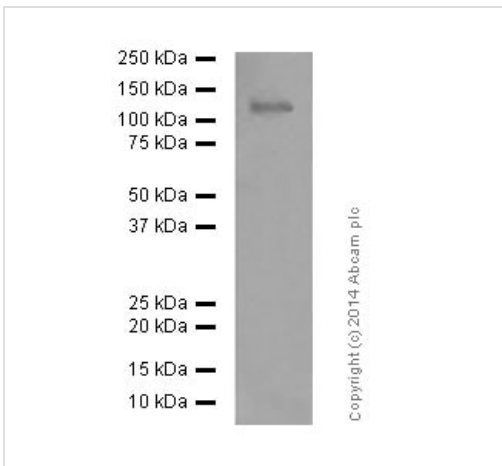
Dilution buffer: 5% NFDM/TBST



Immunocytochemistry/ Immunofluorescence - Anti-NMDAR1 antibody [EPR2481(2)] (ab109182)

Immunocytochemistry/ Immunofluorescence analysis of mouse primary neuron cells labeling NMDAR1 with purified ab109182 at 1/50 (9.5µg/mL). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.



Western blot - Anti-NMDAR1 antibody [EPR2481(2)] (ab109182)

Anti-NMDAR1 antibody [EPR2481(2)] (ab109182) at 1/1000 dilution (purified) + Human cerebellum tissue lysate at 20 µg

Secondary

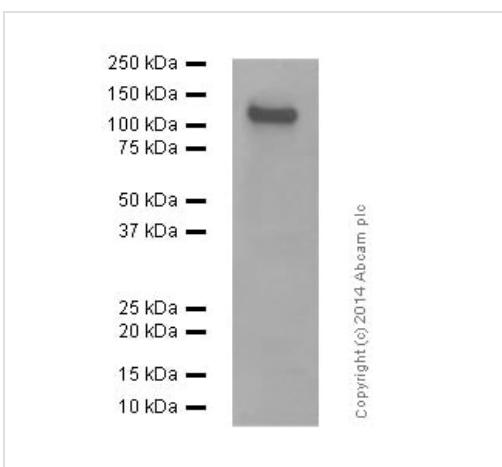
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 105 kDa

Observed band size: 120 kDa

Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



Western blot - Anti-NMDAR1 antibody [EPR2481(2)] (ab109182)

Anti-NMDAR1 antibody [EPR2481(2)] (ab109182) at 1/5000 dilution (purified) + Human fetal brain tissue lysate at 20 µg

Secondary

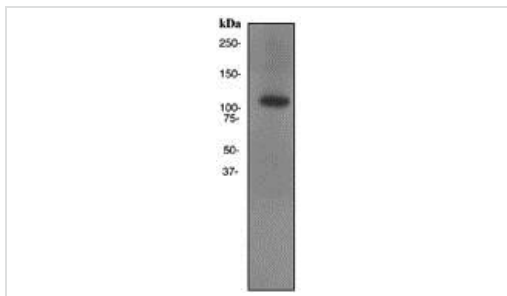
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 105 kDa

Observed band size: 120 kDa

Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



Western blot - Anti-NMDAR1 antibody [EPR2481(2)]
(ab109182)





Anti-NMDAR1 antibody [EPR2481(2)] (ab109182) at 1/1000
dilution (unpurified) + Human fetal brain cell lysate at 10 µg

Predicted band size: 105 kDa

Observed band size: 120 kDa

Secondary antibody - **anti-rabbit HRP (ab6721)**

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-NMDAR1 antibody [EPR2481(2)] (ab109182)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors