# abcam

# Product datasheet

# Anti-Glutamate Receptor 1 (AMPA subtype) antibody [EPR5479] ab109450

重组 Rak

RabMAb

★★★★★ 2 Abreviews 50 References 5 图像

# 概述

产品名称 Anti-Glutamate Receptor 1 (AMPA subtype)抗体[EPR5479]

描述 兔单克隆抗体[EPR5479] to Glutamate Receptor 1 (AMPA subtype)

**宿主** Rabbit

经测试应用 适用于: WB, IP

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab219618)

**阳性**对照 WB: Human, Mouse and Rat brain lysates. IP: Mouse brain lysate.

常规说明 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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

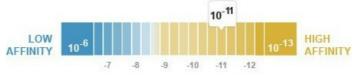
#### 性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

**解离常数(K\_D)**  $K_D = 1.94 \times 10^{-11} M$ 



Learn more about K<sub>D</sub>

**存储溶液** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 EPR5479

**同种型** lgG

# 应用

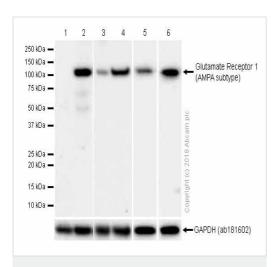
# The Abpromise guarantee Abpromise™承诺保证使用ab109450于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/2000. Detects a band of approximately 106 kDa (predicted molecular weight: 102 kDa).Can be blocked with Glutamate Receptor 1 (AMPA subtype) peptide (ab219618).  For unpurified use at 1/10000 - 1/50000.  We recommend to use 1%SDS Hot lysis prepare method to get desired Western Blot results.
IP	*** <u>*</u> (1)	1/10 - 1/100.

<b>靶</b> 标	
功能	lonotropic glutamate receptor. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the chemical signal to an electrical impulse. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist.
组织 <b>特异性</b>	Widely expressed in brain.
序列相似性	Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA1 subfamily.
翻译后修饰	Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-603 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-829 palmitoylation does not affect cell surface expression but regulates stimulation-dependent endocytosis.
细胞定位	Cell membrane. Endoplasmic reticulum membrane. Cell junction > synapse > postsynaptic cell membrane. Interaction with CACNG2 promotes cell surface expression.

# 图片



Western blot - Anti-Glutamate Receptor 1 (AMPA subtype) antibody [EPR5479] (ab109450)

**All lanes :** Anti-Glutamate Receptor 1 (AMPA subtype) antibody [EPR5479] (ab109450) at 1/2000 dilution

Lane 1: Human brain lysates prepared in RIPA lysis method

Lane 2: Human brain lysates prepared in 1%SDS Hot lysis

method

Lane 3: Rat brain lysates prepared in RIPA lysis method

Lane 4: Rat brain lysates prepared in 1%SDS Hot lysis method

Lane 5: Mouse brain lysates prepared in RIPA lysis method

Lane 6: Mouse brain lysates prepared in 1%SDS Hot lysis method

Lysates/proteins at 20 µg per lane.

#### Secondary

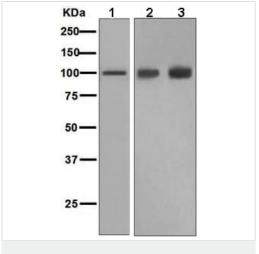
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 102 kDa Observed band size: 102 kDa

## **Exposure times:**

Lanes 1 and 2: 180 seconds
Lanes 3 and 4: 50 seconds
Lanes 5 and 6: 60 seconds

We recommend to use 1%SDS Hot lysis prepare method to get desired Western Blot results.



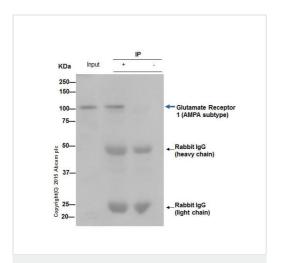
Western blot - Anti-Glutamate Receptor 1 (AMPA subtype) antibody [EPR5479] (ab109450)



Lane 1 : Human brain lysate
Lane 2 : Mouse brain lysate
Lane 3 : Rat brain lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 102 kDa Observed band size: 106 kDa

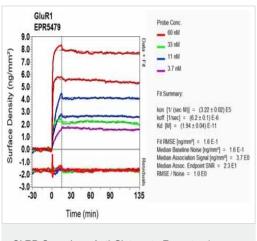


Immunoprecipitation - Anti-Glutamate Receptor 1 (AMPA subtype) antibody [EPR5479] (ab109450)

ab109450 (purified) at 1/20 immunoprecipitating Glutamate Receptor 1 in Mouse Brain whole cell lysate. 10 ug of cell lysate was present in the input. For western blotting, a HRP-conjugated Veriblot for IP Detection Reagent (ab131366) (1/1,500) was used for detection. A rabbit monoclonal IgG (ab172730) was used intead of ab128913 as a negative control (Lane 3).

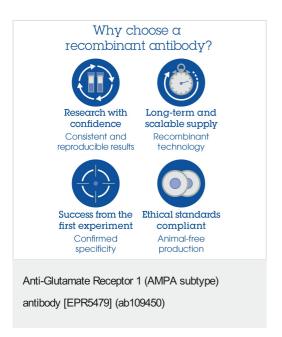
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Ol-RD Scanning - Anti-Glutamate Receptor 1 (AMPA subtype) antibody [EPR5479] (ab109450) Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

Click here to learn more about KD



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