


Anti-Glutamate Receptor 1 (AMPA subtype) antibody ab31232

★★★★★ [9 Abreviews](#) [143 References](#) [4 图像](#)

概述

产品名称	Anti-Glutamate Receptor 1 (AMPA subtype)抗体
描述	兔多克隆抗体 to Glutamate Receptor 1 (AMPA subtype)
宿主	Rabbit
特异性	<p>Based on sequence analysis, ab31232 shares 100% homology with Human, Mouse and Rat Glutamate Receptor 1 (AMPA subtype), however we have been unable to demonstrate reactivity with human tissues in experiments. Abcam welcomes customer feedback and would appreciate any comments regarding this product.</p> <p>Replenishment batches of our polyclonal antibody, ab31232 are tested in WB. Previous batches were additionally validated in IHC-FoFr and IHC-P. These applications are still expected to work and are covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, ab183797.</p>
经测试应用	适用于: WB, IHC-P, IHC-FoFr
种属反应性	<p>与反应: Mouse, Rat, Common marmoset</p> <p>预测可用于: Human, Monkey </p>
免疫原	<p>Synthetic peptide corresponding to Human Glutamate Receptor 1 (AMPA subtype) aa 850 to the C-terminus (C terminal).</p> <p>(Peptide available as ab28424)</p>
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

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 or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40

Preservative: 0.02% Sodium azide
Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

纯度 Immunogen affinity purified
克隆 多克隆
同种型 IgG

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用ab31232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	★★★★★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 100 kDa.Can be blocked with <u>Human Glutamate Receptor 1 (AMPA subtype) peptide (ab28424)</u> .
IHC-P	★★★★★ (4)	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IHC-FoFr	★★★★★ (1)	Use at an assay dependent concentration.

靶标

功能 Ionotropic 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.

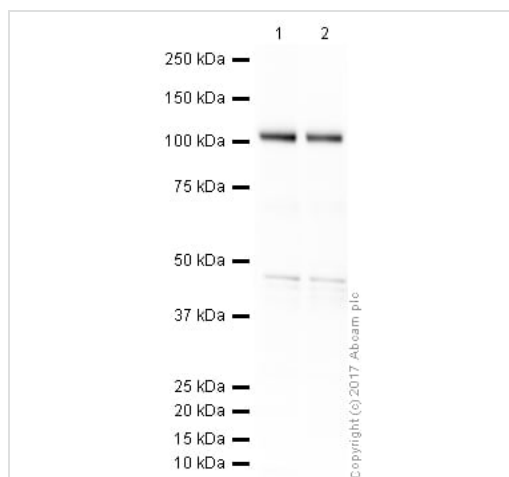
组织特异性 Widely expressed in brain.

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 (ab31232)

All lanes : Anti-Glutamate Receptor 1 (AMPA subtype) antibody (ab31232) at 1 µg/ml

Lane 1 : Brain (Mouse) Tissue Lysate

Lane 2 : Brain (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

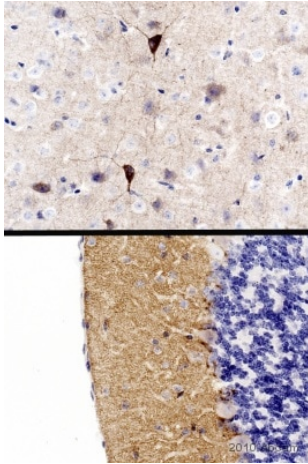
Predicted band size: 102 kDa

Observed band size: 102 kDa

Additional bands at: 47 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes

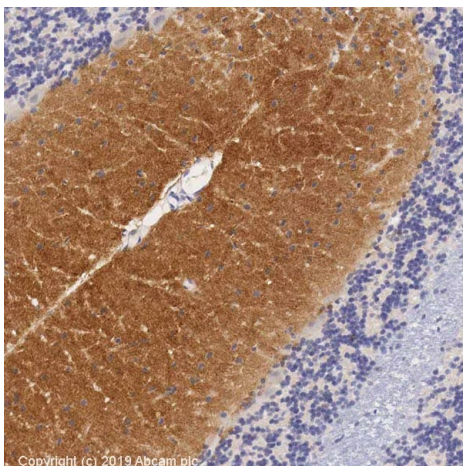
This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab31232 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutamate Receptor 1 (AMPA subtype) antibody (ab31232)

This image is courtesy of Carl Hobbs, King's College London, United Kingdom

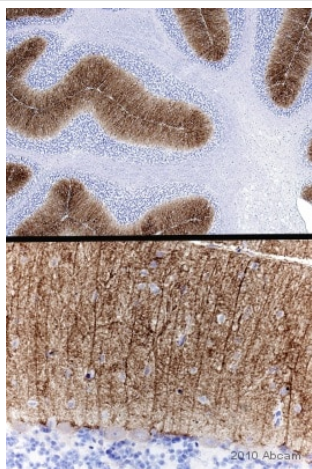
Immunohistochemical detection of Glutamate Receptor 1 (AMPA subtype) with ab31232 on formaldehyde-fixed paraffin-embedded mouse brain sections. Antigen retrieval step: heat mediated in Citric acid pH6 buffer. Blocking step: 1%BSA for 10 mins @ rt°C. Primary antibody ab31232 incubated at 1/100 for 2 hours. Secondary antibody: anti-rabbit IgGs conjugated to biotin (1/200). The composite image shows immunostaining in cell bodies and processes of a subset of neurones in the mouse cortex (upper image) and also in the dendritic fields of the molecular layer of the mouse cerebellum (lower image). Purkinje cells of the cerebellum are negative but their primary processes are clearly delineated by a punctate membrane-region positivity. What appears to be small cells in close contact with the Purkinje cell bodies are strongly positive (perhaps these are basket cells?).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutamate Receptor 1 (AMPA subtype) antibody (ab31232)

IHC image of Glutamate Receptor 1 (AMPA subtype) staining in a section of formalin-fixed paraffin-embedded normal rat brain performed on a Leica BOND™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab31232, 1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutamate Receptor 1 (AMPA subtype) antibody (ab31232)

This image is courtesy of Carl Hobbs, King's College London, United Kingdom

Immunohistochemical detection of Glutamate Receptor 1 (AMPA subtype) with ab31232 on formaldehyde-fixed paraffin-embedded rat cerebellum sections. Antigen retrieval step: heat mediated in citric acid pH6. Blocking step: 1% BSA for 10 mins @ rt°C. Primary antibody was incubated at 1/200 for 2 hours @ room temp. Secondary antibody: anti-rabbit IgGs conjugated to biotin (1/200). The composite image shows localisation of this protein apparently exclusive to the molecular layer of the cerebellum upper image (low power). In the lower image (higher power), the molecular layer positivity appears to be compartmentalised/restricted.

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