

## Product datasheet

# Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] $\alpha$ b206293

Recombinant RabMAb

★★★★★ 3 Abreviews 15 References 5 Images

### Overview

<b>Product name</b>	Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115]
<b>Description</b>	Rabbit monoclonal [EPR18115] to Ionotropic Glutamate receptor 2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Mouse, rat and Human brain lysates; Human fetal brain lysate. IHC-P: Human solitary fibrous tumor tissue. IP: C6 whole cell lysates.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR18115

Isotype

IgG

## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab206293 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
IP		1/40.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC is recommended for human only.
WB	★★★★★ (2)	1/2000. Detects a band of approximately 99 kDa (predicted molecular weight: 99 kDa).

## Target

### Function

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. In the presence of CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of glutamate.

### Sequence similarities

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA2 subfamily.

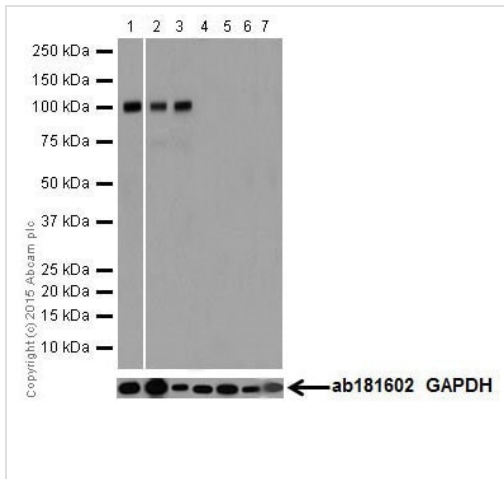
### Post-translational modifications

Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-610 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-836 palmitoylation does not affect cell surface expression but regulates stimulation-dependent endocytosis.

### Cellular localization

Cell membrane. Endoplasmic reticulum membrane. Cell junction > synapse > postsynaptic cell membrane. Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression.

## Images



Western blot - Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] (ab206293)

**All lanes** : Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] (ab206293) at 1/5000 dilution

**Lane 1** : Mouse brain lysate

**Lane 2** : Rat brain lysate

**Lane 3** : Human fetal brain lysate

**Lane 4** : Rat spleen lysate

**Lane 5** : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 6** : Human fetal kidney lysate

**Lane 7** : HT1080 (Human fibrosarcoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

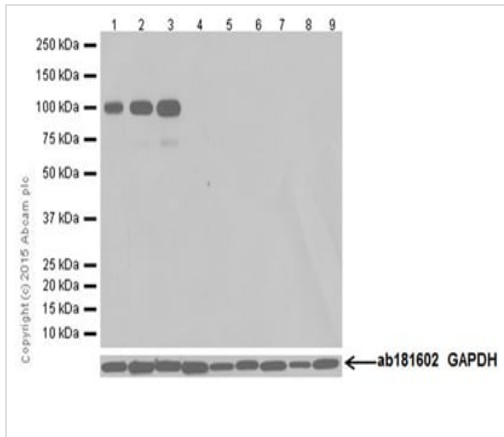
**All lanes** : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/10000 dilution

**Predicted band size:** 99 kDa

**Observed band size:** 99 kDa

Blocking/Dilution buffer: 5% NFD/MTBST.

Exposure time: Lane 1: 1 second; Lane 2,3,4,5,6 and 7: 10 seconds.



Western blot - Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] (ab206293)

**All lanes** : Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] (ab206293) at 1/2000 dilution

**Lane 1** : Human brain lysate

**Lane 2** : Mouse brain lysate

**Lane 3** : Rat brain lysate

**Lane 4** : C6 (Rat glial tumor cell line) whole cell lysate

**Lane 5** : Human fetal kidney lysate

**Lane 6** : HT1080 (Human fibrosarcoma cell line) whole cell lysate

**Lane 7** : Mouse heart lysate

**Lane 8** : Rat spleen lysate

**Lane 9** : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

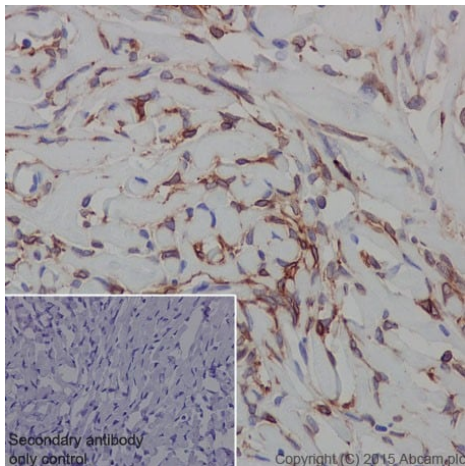
**All lanes** : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/10000 dilution

**Predicted band size:** 99 kDa

**Observed band size:** 99 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFD/MBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] (ab206293)

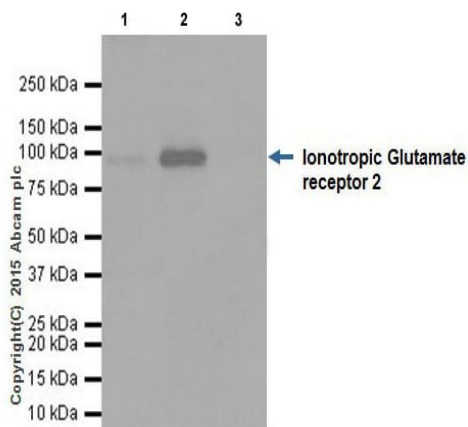
Immunohistochemical analysis of paraffin-embedded Human solitary fibrous tumor tissue labeling Ionotropic Glutamate receptor 2 with ab206293 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane staining on Human solitary fibrous tumor is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] (ab206293)

Ionotropic Glutamate receptor 2 was immunoprecipitated from 1mg of C6 (Rat glial tumor cell line) whole cell lysate with ab206293 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab206293 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: C6 whole cell lysate 10µg (Input).

Lane 2: ab206293 IP in C6 whole cell lysate.

Lane 3: Rabbit IgG, monoclonal [EPR18115] - Isotype Control (ab172730) instead of ab206293 in C6 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 10 seconds.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Ionotropic Glutamate receptor 2 antibody  
[EPR18115] (ab206293)

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

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