

Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] - BSA and Azide free ab251444

Recombinant RabMAb

5 Images

Overview

Product name	Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] - BSA and Azide free
Description	Rabbit monoclonal [EPR18115] to Ionotropic Glutamate receptor 2 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>ab251444 is the carrier-free version of ab206293.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR18115
Isotype	IgG

Applications

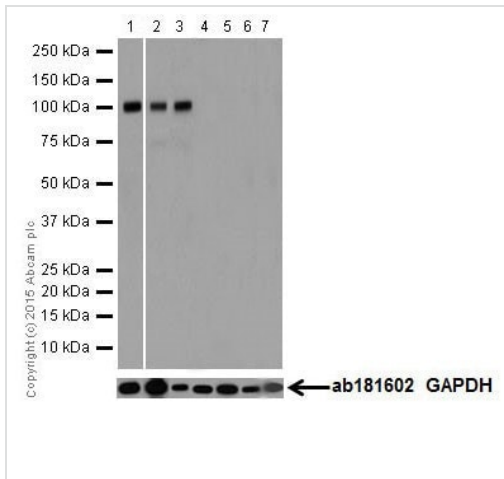
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251444 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 99 kDa (predicted molecular weight: 99 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC is recommended for human only.
IP		Use at an assay dependent concentration.

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] - BSA and Azide free (ab251444)

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

Lane 1 : Mouse brain tissue lysate

Lane 2 : Rat brain tissue lysate

Lane 3 : Human fetal brain tissue lysate

Lane 4 : Rat spleen tissue lysate

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

Lane 6 : Human fetal kidney tissue 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

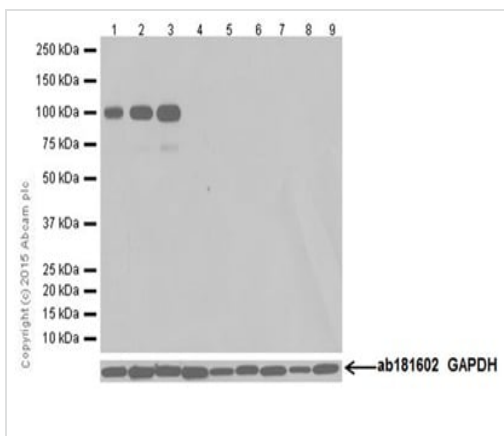
Predicted band size: 99 kDa

Observed band size: 99 kDa

This data was developed using [ab206293](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times: Lane 1: 1 second; Lanes 2-7: 10 seconds.



Western blot - Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] - BSA and Azide free (ab251444)

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

Lane 1 : Human brain tissue lysate

Lane 2 : Mouse brain tissue lysate

Lane 3 : Rat brain tissue lysate

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

Lane 5 : Human fetal kidney tissue lysate

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

Lane 7 : Mouse heart tissue lysate

Lane 8 : Rat spleen tissue 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

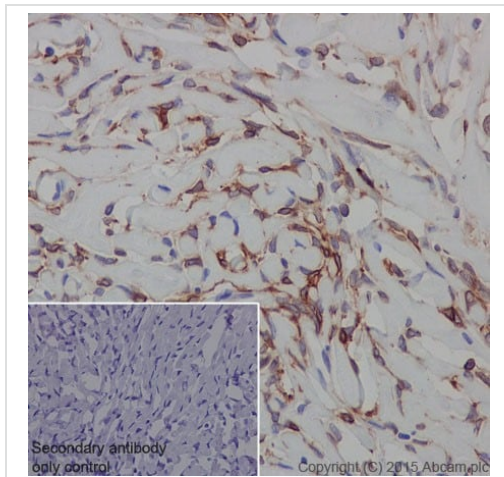
Predicted band size: 99 kDa

Observed band size: 99 kDa

Exposure time: 3 minutes

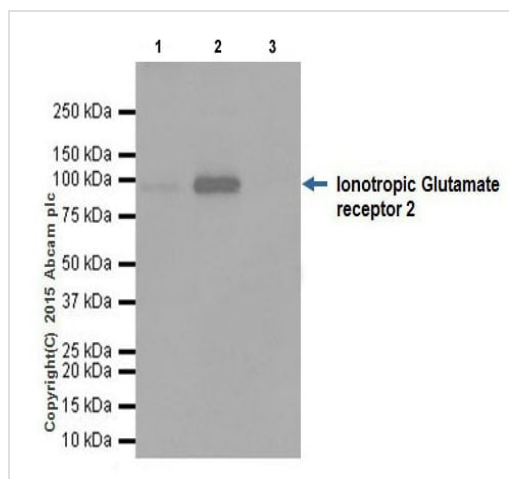
This data was developed using [ab206293](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ionotropic Glutamate receptor 2 antibody [EPR18115] - BSA and Azide free (ab251444)

This data was developed using [ab206293](#), the same antibody clone in a different buffer formulation. 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] - BSA and Azide free (ab251444)

This data was developed using **ab206293**, the same antibody clone in a different buffer formulation. 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

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

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