

## Product datasheet

# Anti-Glutamate Receptor 1 (AMPA subtype) (phospho S845) antibody [EPR2148] - BSA and Azide free ab208790

Recombinant RabMAb

[3 Images](#)

### Overview

<b>Product name</b>	Anti-Glutamate Receptor 1 (AMPA subtype) (phospho S845) antibody [EPR2148] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR2148] to Glutamate Receptor 1 (AMPA subtype) (phospho S845) - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, Dot blot
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human cerebellum lysate.
<b>General notes</b>	ab208790 is the carrier-free version of <a href="#">ab76321</a> .

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.

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.

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.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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](#).

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR2148
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab208790 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
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 102 kDa.
<b>Dot blot</b>		Use at an assay dependent concentration.

## Target

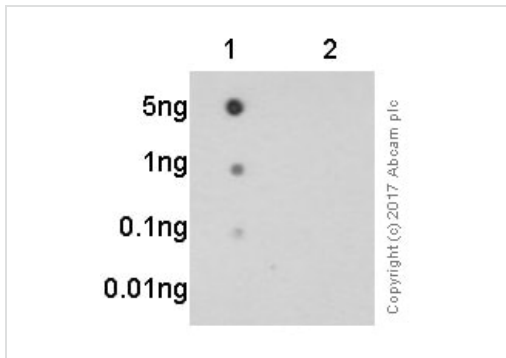
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<b>Function</b>	Ionotropic glutamate receptor. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening 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.
<b>Tissue specificity</b>	Widely expressed in brain.
<b>Sequence similarities</b>	Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA1 subfamily.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Cell membrane. Endoplasmic reticulum membrane. Cell junction > synapse > postsynaptic cell membrane. Interaction with CACNG2 promotes cell surface expression.

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## Images

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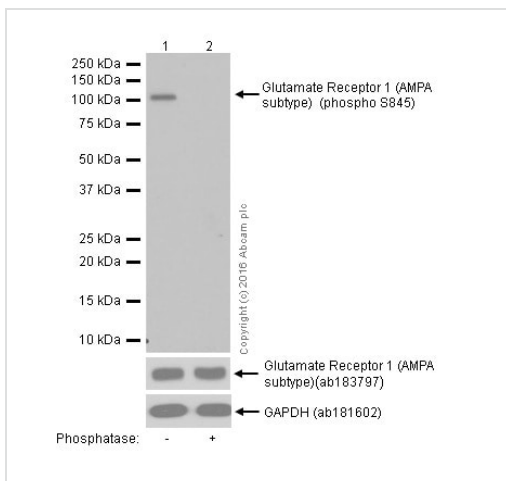
Dot Blot - Anti-Glutamate Receptor 1 (AMPA subtype) (phospho S845) antibody [EPR2148] - BSA and Azide free (ab208790)

Dot blot analysis of Glutamate Receptor 1 (AMPA subtype) labelling Glutamate Receptor 1 (AMPA subtype) (phospho S845) with **ab76321** at 1/1000 in 5% NFDm/TBST. Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) (1/100,000) was used as the secondary antibody. Exposed for 3 minutes.

Lane 1: Glutamate Receptor 1 (AMPA subtype) (pS845) phospho peptide

Lane 2: Glutamate Receptor 1 (AMPA subtype) non-phospho peptide

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76321**).



Western blot - Anti-Glutamate Receptor 1 (AMPA subtype) (phospho S845) antibody [EPR2148] - BSA and Azide free (ab208790)

**All lanes** : Anti-Glutamate Receptor 1 (AMPA subtype) (phospho S845) antibody [EPR2148] (**ab76321**) at 1/1000 dilution

**Lane 1** : Human cerebellum whole cell lysates

**Lane 2** : Human cerebellum whole cell lysates. The membrane was incubated with phosphatase.

Lysates/proteins at 15 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 102 kDa

**Observed band size:** 106 kDa

**Exposure time:** 3 minutes

Blocked with 5% NFDm/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76321**).

### 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-Glutamate Receptor 1 (AMPA subtype)  
(phospho S845) antibody [EPR2148] - BSA and  
Azide free (ab208790)

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

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- Extensive multi-media technical resources to help you
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