




## Product datasheet

# Anti-GABA A Receptor alpha 1 antibody ab33299

★★★★☆ [3 Abreviews](#) [40 References](#) [3 Images](#)

### Overview

---

<b>Product name</b>	Anti-GABA A Receptor alpha 1 antibody
<b>Description</b>	Rabbit polyclonal to GABA A Receptor alpha 1
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody is specific for the GABA A Receptor a1 subunit.
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Rat <b>Predicted to work with:</b> Cow, Cynomolgus monkey 
<b>Immunogen</b>	Synthetic peptide: QPSQDELKDNTTVFT-C , corresponding to N terminal amino acids 1-15 of the mature Rat GABA A Receptor alpha 1 containing a cysteine at the C terminus for linkage to a carrier protein. <a href="#"> Run BLAST with</a> <a href="#"> Run BLAST with</a>

### General notes

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.

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

### 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.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.05% Sodium azide Constituents: 0.184% Tris glycine, 30% Glycerol, 0.87% Sodium chloride
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab33299 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
IHC-P		Use at an assay dependent concentration.
WB	★★★★★ (1)	1/10000. Predicted molecular weight: 52 kDa.
IP		Use at an assay dependent concentration. 5ul immunoprecipitates the GABA A Receptor a1 subunit in rat brain microsomal preparation RIPA lysate.

## Target

### Function

GABA, the major inhibitory neurotransmitter in the vertebrate brain, mediates neuronal inhibition by binding to the GABA/benzodiazepine receptor and opening an integral chloride channel.

### Involvement in disease

Defects in GABRA1 are the cause of childhood absence epilepsy type 4 (ECA4) [MIM:611136]. A subtype of idiopathic generalized epilepsy characterized by onset at age 6-7 years, frequent absence seizures (several per day) and bilateral, synchronous, symmetric 3-Hz spike waves on EEG. During adolescence, tonic-clonic and myoclonic seizures may develop. Absence seizures may either remit or persist into adulthood.

Defects in GABRA1 are the cause of juvenile myoclonic epilepsy type 5 (EJM5) [MIM:611136]. A subtype of idiopathic generalized epilepsy. Patients have afebrile seizures only, with onset in adolescence (rather than in childhood) and myoclonic jerks which usually occur after awakening and are triggered by sleep deprivation and fatigue.

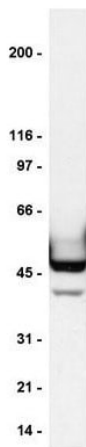
### Sequence similarities

Belongs to the ligand-gated ion channel (TC 1.A.9) family. Gamma-aminobutyric acid receptor (TC 1.A.9.5) subfamily. GABRA1 sub-subfamily.

### Cellular localization

Cell junction > synapse > postsynaptic cell membrane. Cell membrane.

## Images



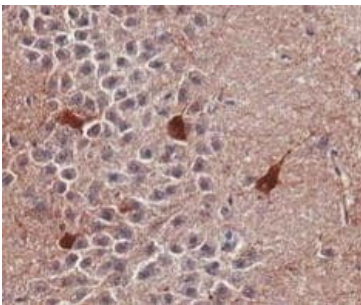
Western blot - Anti-GABA A Receptor alpha 1 antibody (ab33299)

Anti-GABA A Receptor alpha 1 antibody (ab33299) at 1/10000 dilution + rat brain microsomal preparation tissue lysate at 10  $\mu$ g

**Predicted band size:** 52 kDa

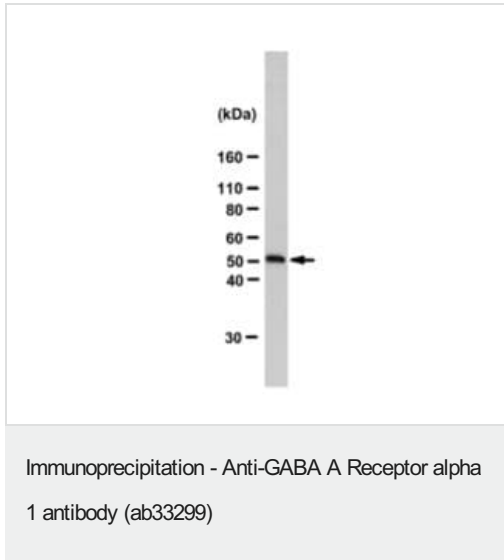
**Observed band size:** 51 kDa

Proteins were visualized using an IgG (HRP) donkey anti-rabbit and a chemiluminescence detection system.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GABA A Receptor alpha 1 antibody (ab33299)

Immunohistochemistry analysis of formalin fixed paraffin embedded rat hippocampus tissue prepared using heat-induced epitope retrieval (HIER) labeling GABA A Receptor alpha 1 using ab33299 at 1/500 dilution. Secondary antibody was an anti-rabbit antibody and HRP-DAB.



Immunoprecipitation analysis: 1 mg of RIPA lysate of rat brain microsomes was immunoprecipitated with 5 uL of ab33299. Arrow indicates GABAA Receptor a1 (~50kD).

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors