Product name: Anti-GABA A Receptor alpha 1 antibody

Description: Rabbit polyclonal to GABA A Receptor alpha 1

Host species: Rabbit

Specificity: This antibody is specific for the GABA A Receptor a1 subunit.

Tested applications: Suitable for: IHC-P, WB, IP

Species reactivity: Reacts with: Rat

Predicted to work with: Cow, Cynomolgus monkey

Immunogen: Synthetic peptide: QPSQDELKDNTTVFTC, 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.

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

Form: Liquid


Storage buffer: pH: 7.40
Preservative: 0.05% Sodium azide
 Constituents: 0.184% Tris glycine, 30% Glycerol, 0.87% Sodium chloride

Purity: Protein A purified

Clonality: 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.

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<th>Application</th>
<th>Abreviews</th>
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<tr>
<td>IHC-P</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>WB</td>
<td>★★★★☆ ☞ (1)</td>
<td>1/10000. Predicted molecular weight: 52 kDa.</td>
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<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration. 5ul immunoprecipitates the GABA A Receptor α1 subunit in rat brain microsomal preparation RIPA lysate.</td>
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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


Images
Anti-GABA A Receptor alpha 1 antibody (ab33299) at 1/10000 dilution + rat brain microsomal preparation tissue lysate at 10 µg

**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 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 µL of ab33299. Arrow indicates GABAA Receptor α1 (~50kD).

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

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