# abcam

### Product datasheet

# Anti-GABA A Receptor gamma 2/GABRG2 antibody ab87328

9 References 2 Images

Overview

Product name Anti-GABA A Receptor gamma 2/GABRG2 antibody

**Description** Rabbit polyclonal to GABA A Receptor gamma 2/GABRG2

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat, Cow

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

**Positive control**This antibody gave a positive signal in the following tissue lysates: human brain; mouse brain;

human spinal cord; mouse spinal cord.

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 instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

**Purity** Immunogen affinity purified

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Clonality Polyclonal

Isotype lgG

#### **Applications**

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab87328 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 a concentration of 1 µg/ml. Detects a band of approximately 51 kDa (predicted molecular weight: 54 kDa).

#### **Target**

#### **Function**

#### Involvement in disease

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.

Defects in GABRG2 are the cause of childhood absence epilepsy type 2 (ECA2) [MIM:607681]. ECA2 is a subtype of idiopathic generalized epilepsy (IGE) characterized by an 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 develop. Some individuals manifest ECA2 occurring in combination with febrile convulsions.

Defects in GABRG2 are the cause of familial febrile convulsions type 8 (FEB8) [MIM:611277]. A febrile convulsion is defined as a seizure event in infancy or childhood, usually occurring between 6 months and 6 years of age, associated with fever but without any evidence of intracranial infection or defined pathologic or traumatic cause. Febrile convulsions affect 5-12% of infants and children up to 6 years of age. There is epidemiological evidence that febrile seizures are associated with subsequent afebrile and unprovoked seizures in 2% to 7% of patients. Defects in GABRG2 are the cause of generalized epilepsy with febrile seizures plus type 3 (GEFS+3) [MIM:604233]. Generalized epilepsy with febrile seizures-plus refers to a rare autosomal dominant, familial condition with incomplete penetrance and large intrafamilial variability. Patients display febrile seizures persisting sometimes beyond the age of 6 years and/or a variety of afebrile seizure types. GEFS+ is a disease combining febrile seizures, generalized seizures often precipitated by fever at age 6 years or more, and partial seizures, with a variable degree of severity.

Defects in GABRG2 are a cause of severe myoclonic epilepsy in infancy (SMEI) [MIM:607208]; also called Dravet syndrome. SMEI is a rare disorder characterized by generalized tonic, clonic, and tonic-clonic seizures that are initially induced by fever and begin during the first year of life. Later, patients also manifest other seizure types, including absence, myoclonic, and simple and complex partial seizures. Psychomotor development delay is observed around the second year of life. SMEI is considered to be the most severe phenotype within the spectrum of generalized epilepsies with febrile seizures-plus.

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

#### Sequence similarities

Palmitoylated by ZDHHC3/GODZ; which may affect presynaptic clustering and/or cell surface stability.

Post-translational

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

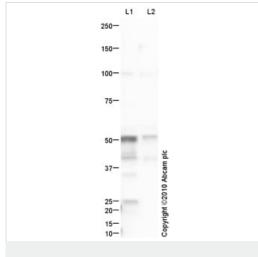
(TC 1.A.9.5) subfamily. GABRG2 sub-subfamily.

modifications

2

**Cellular localization** 

#### **Images**



Western blot - Anti-GABA A Receptor gamma 2/GABRG2 antibody (ab87328)

**All lanes :** Anti-GABA A Receptor gamma 2/GABRG2 antibody (ab87328)

Lane 1: Human brain tissue lysate - total protein (ab29466)

Lane 2: Human spinal cord tissue lysate - total protein (ab29188)

Lysates/proteins at 10 µg per lane.

## Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 54 kDa **Observed band size:** 51 kDa

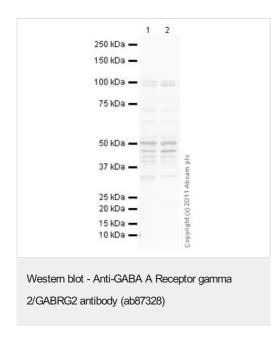
Additional bands at: 25 kDa, 42 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 12 minutes

We hypothesize that the 51 kDa band represents the mature form of GABA A Receptor gamma 2/GABRG2.

Abcam welcomes customer feedback.



**All lanes :** Anti-GABA A Receptor gamma 2/GABRG2 antibody (ab87328) at 1 μg/ml

Lane 1: Brain (Mouse) Tissue Lysate

Lane 2: Spinal Cord (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) preadsorbed

(ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 54 kDa **Observed band size:** 50 kDa

Additional bands at: 100 kDa, 45 kDa, 48 kDa. We are unsure as

to the identity of these extra bands.

Exposure time: 1 minute

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

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