

Datasheet for ABIN6658227

anti-GABRG2 antibody (Cytoplasmic Loop)[Go to Product page](#)**1** Image**2** Publications

Overview

Quantity:	100 µL
Target:	GABRG2
Binding Specificity:	Cytoplasmic Loop
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GABRG2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Multiplex Assay (MA)

Product Details

Purpose:	GABA(A) Receptor gamma 2 Antibody
Immunogen:	Anti-GABA(A) Receptor gamma 2 Antibody was produced by repeated immunizations with recombinant fusion proteins from the cytoplasmic loop of the gamma 2 subunit of rat GABAA.
Isotype:	IgG
Cross-Reactivity (Details):	Anti-GABA(A) Receptor gamma 2 Antibody is directed against rat GABA(A) Receptor gamma 2.
Purification:	The antibody was affinity purified from monospecific antiserum by immune affinity purification.

Target Details

Target:	GABRG2
Alternative Name:	GABA(A) Receptor gamma 2 (GABRG2 Products)

Target Details

Background:	Synonyms: Gamma-aminobutyric acid receptor subunit gamma-2, GABA(A) receptor subunit gamma-2, Gabrg2 Background: Anti-GABA(A) Receptor gamma 2 Antibody detects GABA(A) Receptor gamma 2. Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system, causing a hyperpolarization of the membrane through the opening of a Cl⁻ channel associated with the GABAA receptor (GABAA-R) subtype. GABAA-Rs are important therapeutic targets for a range of sedative, anxiolytic, and hypnotic agents and are implicated in several diseases including epilepsy, anxiety, depression, and substance abuse. The GABAA-R is a multimeric subunit complex. To date six alphas, four betas and four gammas, plus alternative splicing variants of some of these subunits, have been identified. Injection in oocytes or mammalian cell lines of cRNA coding for alpha- and beta-subunits results in the expression of functional GABAA-Rs sensitive to GABA. However, coexpression of a gamma-subunit is required for benzodiazepine modulation. The various effects of the benzodiazepines in brain may also be mediated via different alpha-subunits of the receptor. Anti-GABA(A) Receptor gamma 2 Antibody is ideal for investigators involved in Neuroscience. Gene Name: GABRG2
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Gene ID:	29709
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NCBI Accession:	NP_899156
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UniProt:	P18508
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Application Details

Application Notes:	Immunohistochemistry_Dilution: 1:100 Western_Blot_Dilution: 1:1000
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Comment:	Suggested Applications: Other Anti-GABA(A) Receptor gamma 2 (Rabbit) antibody has been tested in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of 46 kDa in size corresponding to the gamma 2 subunit of the GABA(A) receptor in the appropriate cell lysate or extract.
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Buffer:	Buffer: 0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
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Handling

Stabilizer: 0.1 mg/mL Bovine Serum Albumin (BSA) - IgG and Protease free, 50 % (v/v) Glycerol

Storage: 4 °C, -20 °C

Storage Comment: Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.

Expiry Date: 12 months

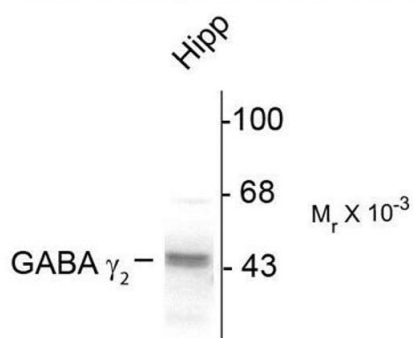
Publications

Product cited in: Yamaura, Kiyonaka, Hamachi: "Construction of Protein-Based Biosensors Using Ligand-Directed Chemistry for Detecting Analyte Binding." in: **Methods in enzymology**, Vol. 589, pp. 253-280, (2017) ([PubMed](#)).

Yamaura, Kiyonaka, Numata, Inoue, Hamachi: "Discovery of allosteric modulators for GABAA receptors by ligand-directed chemistry." in: **Nature chemical biology**, Vol. 12, Issue 10, pp. 822-30, (2017) ([PubMed](#)).

Images

Anti-GABAA-Receptor, Gamma2-Subunit



Western blot of 10 ug of rat hippocampal (Hipp) lysate showing specific immunolabeling of the ~46k Gamma2-subunit of GABAA -R.

Western Blotting

Image 1. Western blot of GABAA Receptor γ2 Antibody Western Blot of Rabbit anti-GABAA Receptor γ2 Antibody. Lane 1: rat hippocampal lysate. Lane 2: none. Load: 10 µg per lane. Primary antibody: GABAA-R antibody at 1:400 for overnight at 4°C. Secondary antibody: rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~46kDa/~46kDa for γ2-subunit of GABAA -R. Other band(s): none.