

**Anti-GABAA Receptor  $\gamma$ 2 Antibody**

**Our Anti-GABAA Receptor  $\gamma$ 2, rabbit polyclonal primary antibody from PhosphoSolutions is produced in-  
Catalog # AN1404**

**Specification**

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**Anti-GABAA Receptor  $\gamma$ 2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P18508</a>
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	54077

**Anti-GABAA Receptor  $\gamma$ 2 Antibody - Additional Information**

Gene ID **29709**

**Other Names**

CAE 2 antibody, CAE2 antibody, ECA 2 antibody, ECA2 antibody, GABA(A) receptor gamma 2 antibody, GABA(A) receptor subunit gamma 2 antibody, GABA(A) receptor subunit gamma-2 antibody, GABRG 2 antibody, GABR $\gamma$ 2 antibody, Gamma aminobutyric acid (GABA) A receptor gamma 2 antibody, Gamma aminobutyric acid A receptor gamma 2 antibody, Gamma aminobutyric acid receptor gamma 2 subunit antibody, Gamma-aminobutyric acid receptor subunit gamma-2 antibody, GBR $\gamma$ 2\_HUMAN antibody, GEFSP 3 antibody, GEFSP3 antibody

**Target/Specificity**

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<sup>-</sup> channel associated with the GABA-A receptor (GABA-A-R) subtype. GABA-A-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 GABA-A-R is a multimeric subunit complex. To date six  $\alpha$ s, four  $\beta$ s and four  $\gamma$ s, plus alternative splicing variants of some of these subunits, have been identified (Olsen and Tobin, 1990; Whiting et al., 1999; Ogris et al., 2004). Injection in oocytes or mammalian cell lines of cRNA coding for  $\alpha$ - and  $\beta$ -subunits results in the expression of functional GABA-A-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 (McKernan et al., 2000; Mehta and Ticku, 1998; Ogris et al., 2004; Pörtl et al., 2003).

**Dilution**

WB~~1:1000

**Format**

Antigen Affinity Purified from Pooled Serum

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Anti-GABAA Receptor  $\gamma 2$  Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Shipping

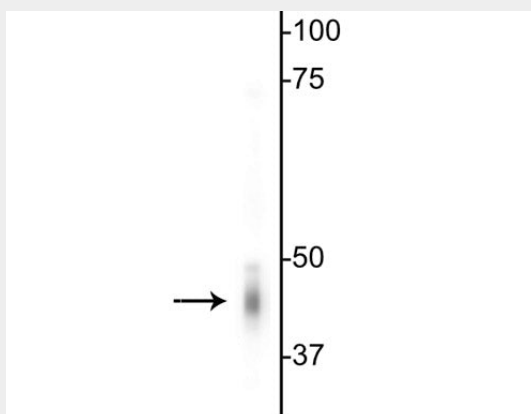
Blue Ice

## Anti-GABAA Receptor $\gamma 2$ Antibody - Protocols

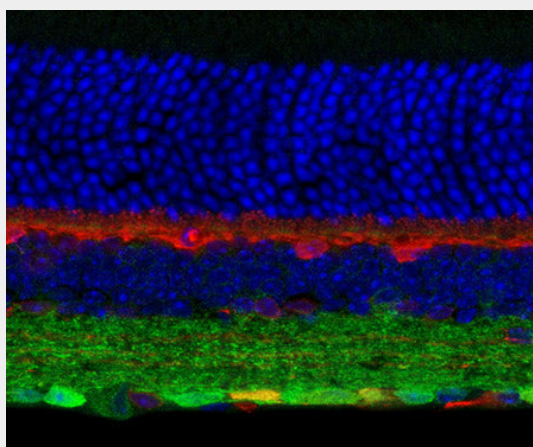
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-GABAA Receptor $\gamma 2$ Antibody - Images



Western blot of mouse whole brain lysate showing specific immunolabeling of the ~46 kDa  $\gamma 2$ -subunit of GABAA Receptor.



Immunostaining of mouse retina showing specific labeling of the GABAA-R  $\gamma 2$  subunit (cat. 832A-GG2C, green, 1:300) and calbindin (red). The blue stain is DAPI staining nuclear DNA. Photo

courtesy of Dr. Arlene Hirano, UCLA.

### **Anti-GABAA Receptor $\gamma$ 2 Antibody - Background**

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  $\text{Cl}^-$  channel associated with the GABA-A receptor (GABA-A-R) subtype. GABA-A-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 GABA-A-R is a multimeric subunit complex. To date six  $\alpha$ s, four  $\beta$ s and four  $\gamma$ s, plus alternative splicing variants of some of these subunits, have been identified (Olsen and Tobin, 1990; Whiting et al., 1999; Ogris et al., 2004). Injection in oocytes or mammalian cell lines of cRNA coding for  $\alpha$ - and  $\beta$ -subunits results in the expression of functional GABA-A-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 (McKernan et al., 2000; Mehta and Ticku, 1998; Ogris et al., 2004; Pölzl et al., 2003).