

**Anti-GABAA Receptor,  $\beta$ 3 (Ser408/409) Antibody**

**Our Anti-GABAA Receptor,  $\beta$ 3 (Ser408/409) rabbit polyclonal phosphospecific primary antibody from Pho**  
**Catalog # AN1401**

**Specification****Anti-GABAA Receptor,  $\beta$ 3 (Ser408/409) Antibody - Product Information**

Primary Accession	<a href="#">P63079</a>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>54166</b>

**Anti-GABAA Receptor,  $\beta$ 3 (Ser408/409) Antibody - Additional Information**

Gene ID **24922**

**Other Names**

ECA5 antibody, GABA alpha receptor beta-2 subunit antibody, GABA(A) receptor subunit beta-3 antibody, GABAA receptor beta 3 subunit antibody, GABAA receptor subunit beta 3 antibody, GABR B3 antibody, Gabrb3 antibody, Gamma aminobutyric acid (GABA) A receptor beta 3 antibody, Gamma aminobutyric acid receptor subunit beta 3 antibody, Gamma-aminobutyric acid receptor subunit beta-3 antibody, GBRB3\_HUMAN antibody, MGC9051 antibody

**Target/Specificity**

Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system. There are two major classes of GABA receptors: the GABA-A and the GABA-B subtype of receptors. 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. Phosphorylation of serine 408 and serine 409 within the  $\beta$ 3 subunit have been shown to be critical for the functional modulation of  $\beta$ 3 containing recombinant receptors (Brandon et al., 2000).

**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,  $\beta$ 3 (Ser408/409) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

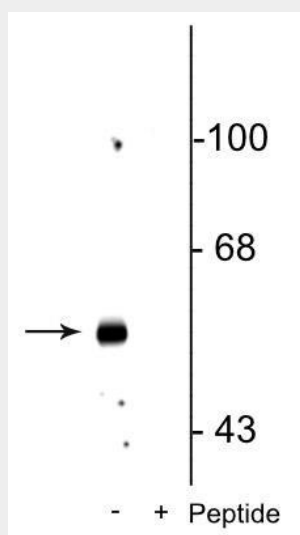
Blue Ice

## Anti-GABAA Receptor, $\beta$ 3 (Ser408/409) 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, $\beta$ 3 (Ser408/409) Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~58 kDa GABAA  $\beta$ 3 protein phosphorylated at Ser408/409 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is blocked by preadsorption of the phosphopeptide used as the antigen, but not by the corresponding non-phosphopeptide (not shown).

## Anti-GABAA Receptor, $\beta$ 3 (Ser408/409) Antibody - Background

Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system. There are two major classes of GABA receptors: the GABA-A and the GABA-B subtype of receptors. 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. Phosphorylation of serine 408 and serine 409 within the  $\beta$ 3 subunit have been shown to be critical for the functional modulation of  $\beta$ 3 containing recombinant receptors (Brandon et al., 2000).