

# Anti-GABAA Receptor, ß3 (Ser408/409) Antibody

Our Anti-GABAA Receptor, ß3 (Ser408/409) rabbit polyclonal phosphospecific primary antibody from Pho Catalog # AN1401

#### **Product Information**

Application	WB
Primary Accession	<u>P63079</u>
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	54166

### **Additional Information**

Gene ID Other Names	24922 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
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).
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, ß3 (Ser408/409) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## 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).

#### 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.