

Datasheet for ABIN361470

**anti-GABRG2 antibody (pSer327)**[Go to Product page](#)

2 Images

1 Publication

## Overview

Quantity:	100 µL
Target:	GABRG2
Binding Specificity:	pSer327
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB)

## Product Details

Immunogen:	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser327 conjugated to KLH
Specificity:	Specific for ~45k GABAA receptor gamma2 subunit phosphorylated at Ser327. Immunolabeling of the GABAA band is completely blocked by lambda phosphatase treatment.
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Predicted Reactivity:	bovine, canine, chicken, human, non-human primate
Purification:	Antigen Affinity Purified from Pooled Serum

## Target Details

Target:	GABRG2
Alternative Name:	GABRG2 ( <a href="#">GABRG2 Products</a> )

## Target Details

**Background:** Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system. There are two major classes of GABA receptors: the GABAA and the GABAB subtype of receptors. 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 sub-stance 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 (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 GABAA-Rs sensitive to GABA. However, coexpression of a gamma subunit is required for benzodiazepine modulation. It has recently been suggested that PKC regulates the sensitivity of GABAA alpha1beta2gamma2 receptors to ethanol and benzodiazepines through phosphorylation of serine 327 in the large intracellular loop of gamma2 (Qi et al., 2007)

**Molecular Weight:** '45 kDa

**Gene ID:** 29709

**UniProt:** [P18508](#)

## Application Details

**Application Notes:** Recommended Dilution: WB: 1:1000 Quality Control: Western blots performed on each lot.

**Restrictions:** For Research Use only

## Handling

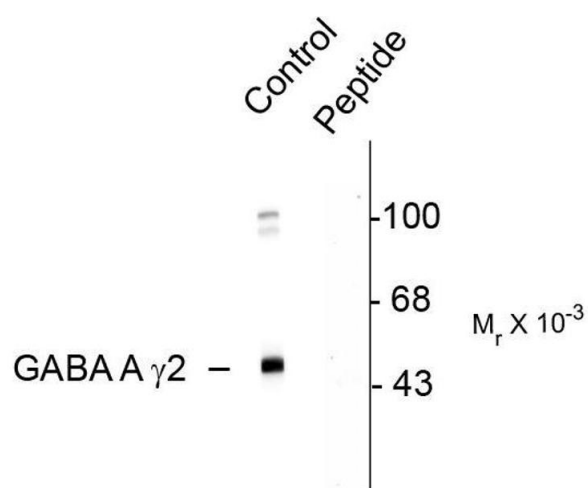
**Format:** Liquid

**Buffer:** 100 µL in 10 mM HEPES ( pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50 % glycerol.

**Storage:** -20 °C

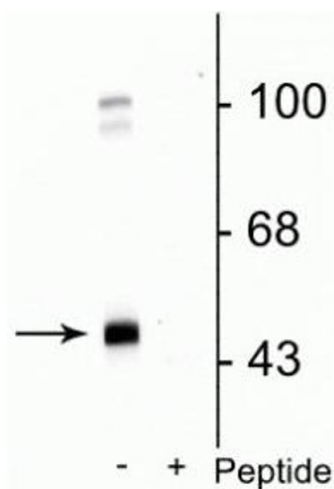
## Publications

**Product cited in:** Jiao, Wei, Chen, Li, Wang, Li, Guo, Zhang, Wei: "Cartilage oligomeric matrix protein and hyaluronic acid are sensitive serum biomarkers for early cartilage lesions in the knee joint." in: **Biomarkers : biochemical indicators of exposure, response, and susceptibility to chemicals**, Vol. 21, Issue 2, pp. 146-51, (2016) ([PubMed](#)).



#### Western Blotting

**Image 1.** Western blots of rat cortex showing specific immunolabeling of the ~45k GABA A  $\gamma$ 2 protein phosphorylated at Ser327 (control). Immunolabeling is blocked by the phospho-peptide (peptide) used as antigen but not by the corresponding dephosphopeptide (not shown).



#### Western Blotting

**Image 2.** Western blot of rat cortical lysate showing specific immunolabeling of the ~45 kDa GABA A  $\gamma$ 2 protein phosphorylated at Ser327 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).