

**ARG52303**  
anti-GABAA Receptor gamma 2 phospho (Ser327) antibodyPackage: 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes GABAA Receptor gamma 2 phospho (Ser327)
Tested Reactivity	Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GABAA Receptor gamma 2
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser327 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	A; CAE2; ECA2; GEFSP3; Gamma-aminobutyric acid receptor subunit gamma-2; GABA

### Application Instructions

Application table	Application	Dilution
	WB	1:1,000
Application Note	Specific for ~45k GABAA receptor $\gamma$ 2 subunit phosphorylated at Ser327. Immunolabeling of the GABAA band is completely blocked by $\lambda$ -phosphatase treatment. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

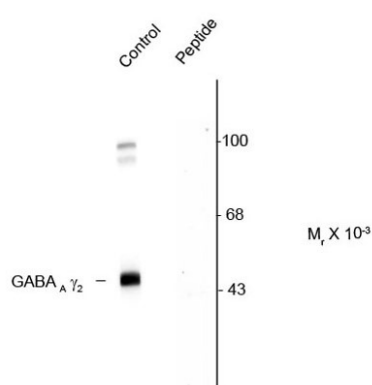
### Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Database links	<a href="#">GeneID: 29709 Rat</a> <a href="#">Swiss-port # P18508 Rat</a>
Gene Symbol	GABRG2
Gene Full Name	gamma-aminobutyric acid (GABA) A receptor, gamma 2
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 substance abuse. The GABAA-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 GABAA-Rs sensitive to GABA. However, coexpression of a $\gamma$ -subunit is required for benzodiazepine modulation. It has recently been suggested that PKCE regulates the sensitivity of GABAA $\alpha$ 1 $\beta$ 2 $\gamma$ 2 receptors to ethanol and benzodiazepines through phosphorylation of serine 327 in the large intracellular loop of $\gamma$ 2 (Qi et al., 2007)
Research Area	Neuroscience antibody
Calculated Mw	54 kDa
PTM	Palmitoylated by ZDHHC3/GODZ; which may affect presynaptic clustering and/or cell surface stability.

## Images



ARG52303 anti-GABAA Receptor gamma 2 phospho (Ser327) antibody WB image

Western blot: Rat cortex showing specific immunolabeling of the ~45 kDa GABA  $\gamma$  2 protein phosphorylated at Ser327 (control) stained with ARG52303 anti-GABAA Receptor gamma 2 phospho (Ser327) antibody. Immunolabeling is blocked by the phosphopeptide (Peptide) used as antigen but not by the corresponding dephosphopeptide.