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Anti-GABAA Receptor γ2 (Ser327) Antibody

Our Anti-GABAA Receptor γ2 (Ser327) rabbit polyclonal phosphospecific primary antibody from PhosphoS
Catalog # AN1405

Product Information

Application	WB
Primary Accession	P18508
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	54077

Additional Information

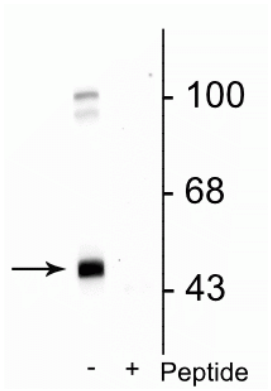
Gene ID	29709
Other Names	CAE 2 antibody, CAE2 antibody, ECA 2 antibody, ECA2 antibody, GABA(A) receptor gamma 2 antibody, GABA(A) receptor subunit gamma 2 antibody, GABA(A) receptor subunit gamma-2 antibody, GABRγ2 antibody, GABRG2 antibody, Gamma aminobutyric acid (GABA) A receptor gamma 2 antibody, Gamma aminobutyric acid A receptor gamma 2 antibody, Gamma aminobutyric acid receptor gamma 2 subunit antibody, Gamma-aminobutyric acid receptor subunit gamma-2 antibody, GBRG2_HUMAN antibody, GEFSP 3 antibody, GEFSP3 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-AB 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 αs, four βs and four γs, 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 α- and β-subunits results in the expression of functional GABA-A-Rs sensitive to GABA. However, coexpression of a γ-subunit is required for benzodiazepine modulation. It has recently been suggested that PKCε regulates the sensitivity of GABA-A α1β2γ2 receptors to ethanol and benzodiazepines through phosphorylation of serine 327 in the large intracellular loop of γ2 (Qi et al., 2007)
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 γ2 (Ser327) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

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-AB 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 αs, four βs and four γs, 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 α- and β-subunits results in the expression of functional GABA-A-Rs sensitive to GABA. However, coexpression of a γ-subunit is required for benzodiazepine modulation. It has recently been suggested that PKCε regulates the sensitivity of GABA-A α1β2γ2 receptors to ethanol and benzodiazepines through phosphorylation of serine 327 in the large intracellular loop of γ2 (Qi et al., 2007)

Images



Western blot of rat cortical lysate showing specific immunolabeling of the ~45 kDa GABAA γ2 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).