10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-GABAA Receptor α5 Antibody

Our Anti-GABAA Receptor α5 rabbit polyclonal primary antibody from PhosphoSolutions is produced in-h
Catalog # AN1395

Product Information

Application	WB, IHC
Primary Accession	P19969
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	52337

Additional Information

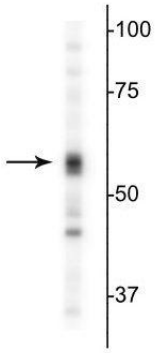
Gene ID	29707
Other Names	GAα5 antibody, GAA5 antibody, GABA(A) receptor subunit alpha-5 antibody, GABRα5 antibody, Gabra5 antibody, Gamma aminobutyric acid GABA A receptor alphα5 antibody, Gamma aminobutyric acid GABA A receptor alphα5 precursor antibody, Gamma aminobutyric acid receptor alphα5 subunit precursor GABA A receptor antibody, Gamma-aminobutyric acid receptor subunit alpha-5 antibody, GBRA5_HUMAN antibody, GC138184 antibody
Target/Specificity	Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system, causing a hyperpolarization of the membrane through the opening of a Cl- channel associated with the GABA-A receptor (GABA-A-R) subtype. 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. The various effects of the benzodiazepines in brain may also be mediated via different α-subunits of the receptor (McKernan et al., 2000; Mehta and Ticku, 1998; Ogris et al., 2004; P □tl et al., 2003).
Dilution	WB~~1:1000 IHC~~1:100~500
Format	Antigen Affinity Purified 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 α5 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, causing a hyperpolarization of the membrane through the opening of a Cl- channel associated with the GABA-A receptor (GABA-A-R) subtype. 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. The various effects of the benzodiazepines in brain may also be mediated via different α-subunits of the receptor (McKernan et al., 2000; Mehta and Ticku, 1998; Ogris et al., 2004; P ltl et al., 2003).

Images



Western blot of mouse whole brain showing specific immunolabeling of the ~55 kDa α5-subunit of the GABAA-R.