

Anti-GABAA Receptor α 4, Antibody

Our Anti-GABAA Receptor α 4, rabbit polyclonal primary antibody from PhosphoSolutions is produced in-
Catalog # AN1394

Product Information

Application	WB, IHC
Primary Accession	P28471
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	60951

Additional Information

Gene ID	140675
Other Names	GABA(A) receptor subunit α 4 antibody, GABA(A) receptor subunit α -4 antibody, GABR A4 antibody, GABR α 4 antibody, Gabra4 antibody, Gamma aminobutyric acid (GABA) A receptor α 4 antibody, Gamma aminobutyric acid A receptor α 4 antibody, Gamma aminobutyric acid receptor α 4 subunit antibody, Gamma aminobutyric acid receptor subunit α 4 antibody, Gamma-aminobutyric acid receptor subunit α -4 antibody, GBRA4_HUMAN 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; Pölzl et al., 2003).
Dilution	WB~~1:1000 IHC~~1:100~500
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 α 4, Antibody is for research use only and not for use in

diagnostic or therapeutic procedures.

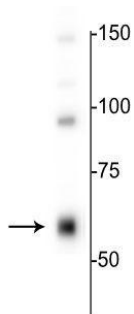
Shipping

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 α s, four β s and four γ 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 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; Pölzl et al., 2003).

Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~64 kDa α 4-subunit of the GABAA-R.

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