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

Anti-GABAA Receptor α3 Antibody

Our Anti-GABAA Receptor α3 primary antibody from PhosphoSolutions is rabbit polyclonal. It detects m
Catalog # AN1393

Product Information

Application	WB, IHC
Primary Accession	P20236
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	55430

Additional Information

Gene ID	24947
Other Names	GABA A Receptor alphα3 antibody, GABA(A) receptor subunit alphα3 antibody, GABA(A) receptor subunit alpha-3 antibody, GABR A3 antibody, GABRα3 antibody, Gabra3 antibody, Gamma aminobutyric acid (GABA) A receptor alphα3 antibody, Gamma aminobutyric acid A receptor alphα3 antibody, Gamma aminobutyric acid receptor subunit alphα3 antibody, Gamma-aminobutyric acid receptor subunit alpha-3 antibody, GBRA3_HUMAN antibody, MGC33793 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
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 α3 Antibody is for research use only and not for use in

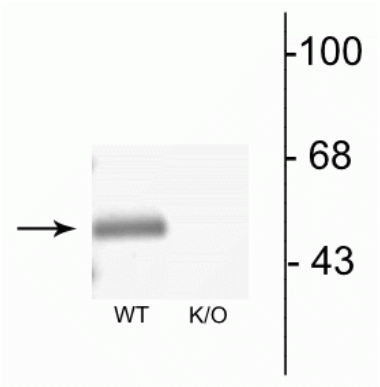
diagnostic or therapeutic procedures.

Shipping Blue Ice

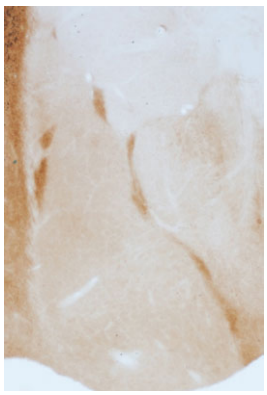
Background

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 brain lysates from wild type (WT) and α3-knockout (K/O) animals showing specific immunolabeling of the ~51 kDa α3-subunit of the GABAA-R. The labeling was absent from a lysate prepared from α3-knockout animals.



Immunostaining of rat amygdala showing labeling of GABAA α3 subunit (DAB, 1:100).