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Anti-GABAA Receptor α6 Antibody

Our Anti-GABAA Receptor α6 primary antibody from PhosphoSolutions is rabbit polyclonal. It detects m
Catalog # AN1396

Product Information

Application	WB
Primary Accession	P30191
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	51184

Additional Information

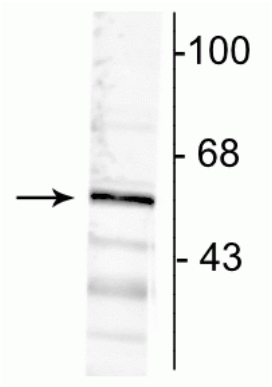
Gene ID	29708
Other Names	GABA A antibody, GABA A Receptor alphα6 polypeptide antibody, GABA A receptor alphα6 antibody, GABA A receptor subunit alphα6 antibody, GABA subunit A receptor alphα6 antibody, GABA(A) receptor subunit alpha-6 antibody, GABRα6 antibody, GABRA6 antibody, Gamma aminobutyric acid A receptor alphα6 antibody, Gamma aminobutyric acid GABA A receptor alphα6 antibody, Gamma aminobutyric acid receptor subunit alphα6 antibody, Gamma-aminobutyric acid receptor subunit alpha-6 antibody, GBRA6_HUMAN antibody, MGC116903 antibody, MGC116904 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). Lastly, phosphorylation of β-subunits of the receptor has been shown to modulate GABAA-R function (Brandon et al., 2003).
Dilution	WB~~1:1000
Format	Neat 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 α6 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). Lastly, phosphorylation of β-subunits of the receptor has been shown to modulate GABAA-R function (Brandon et al., 2003).

Images



Western blot of rat cortical lysate showing specific immunolabeling of the ~57 kDa α6-subunit of the GABAA-R.