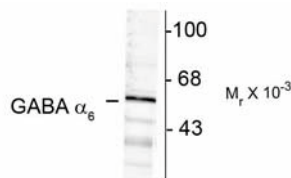


Pel-Freeze®**Product Specifications****Anti-GABA_A Receptor, α_6 -Subunit****Size:** 50 μ l**Product Description:** Rabbit polyclonal antibody**Applications: WB:** 1:1000**Antigen:** Peptide representing a sequence that is specific for the α_6 -subunit of rat GABA_A receptor. Peptide antigen has no homology with any other GABA_A R-subunit.**Species reactivity:** The antibody has been directly tested for reactivity in Western blots in rat and mouse tissues.

Biological Significance: *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; Pörtl et al., 2003). Lastly, phosphorylation of β -subunits of the receptor has been shown to modulate GABA_A-R function (Brandon et al., 2003).

Anti-GABA_A-Receptor, α_6 -Subunit

Western blot of rat cortex lysate showing immunolabeling of the ~57k α_6 -subunit of the GABA_A-R.

Purification Method: Unpurified neat serum.

Antibody Specificity: Labels the ~57k α_6 -subunit of the GABA_A receptor in Western blots of rat brain extracts.

Quality Control Tests: Western blots performed on each lot.

References:

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