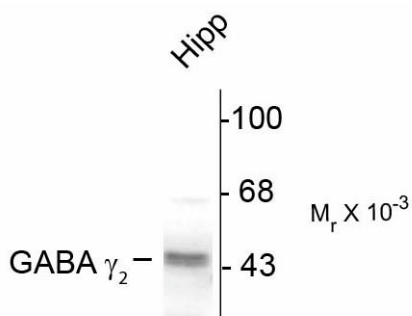


Pel-Freez®**Product Specifications****Anti-GABA_A Receptor, γ_2 -Subunit****Size:** 50 μ l**Product Description:** Affinity purified rabbit polyclonal antibody**Applications: WB:** 1:1000**Antigen:** Fusion protein from the cytoplasmic loop of the γ_2 -subunit of rat GABA_A receptor.**Species reactivity:** The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will react with bovine, canine, chicken, human, mouse and non-human primate based on the fact that these species have 100% homology with the amino acid sequence used as antigen.**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).**Anti-GABA_A-Receptor, γ_2 -Subunit**

Western blot of 10 μ g of rat hippocampal (Hipp) lysate showing specific immunolabeling of the ~46k γ_2 -subunit of GABA_A-R.

Page 1 of 2

WB = Western Blot **IF** = Immunofluorescence **IHC** = Immunohistochemistry **IP** = Immunoprecipitation **Packaging:** 100 μ l in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 μ g per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots. **Storage and Stability.** For long term storage – is recommended. Stable at – for at least 1 year. **Shipment:** Domestic - Blue Ice; International – Blue Ice or Dry Ice.

Purification Method: Prepared from rabbit serum by affinity purification using a column to which the fusion protein immunogen was coupled.

Antibody Specificity: Specific for the ~46k γ_2 -subunit of the GABA_A receptor in Western blots.

Quality Control Tests: Western blots performed on each lot.

References:

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