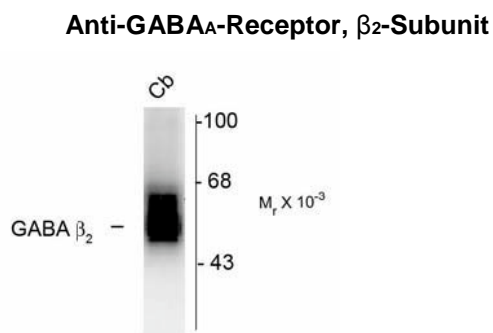


**Pel-Freez®****Product Specifications****Anti-GABA<sub>A</sub> Receptor,  $\beta_2$ -Subunit****Size:** 100  $\mu$ l**Product Description:** Affinity purified rabbit polyclonal antibody**Applications: WB:** 1:1000**Antigen:** Fusion protein from the cytoplasmic loop of the  $\beta_2$ -subunit of rat GABA<sub>A</sub> 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 canine, 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<sup>-</sup> channel associated with the GABA<sub>A</sub> receptor (GABA<sub>A</sub>-R) subtype. GABA<sub>A</sub>-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<sub>A</sub>-R is a multimeric subunit complex. To date six  $\alpha$ s, four  $\beta$ s and four  $\gamma$ 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  $\alpha$ - and  $\beta$ -subunits results in the expression of functional GABA<sub>A</sub>-Rs sensitive to GABA. However, coexpression of a  $\gamma$ -subunit is required for benzodiazepine modulation. The various effects of the benzodiazepines in brain may also be mediated via different  $\alpha$ -subunits of the receptor (McKernan et al., 2000; Mehta and Ticku, 1998; Ogris et al., 2004; Pörtl et al., 2003).

**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 ~55k  $\beta_2$ -subunit of the GABA<sub>A</sub> receptor in Western blots.

**Quality Control Tests:** Western blots performed on each lot.

**References:**

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