Anti-GABA<sub>A</sub> Receptor, β<sub>3</sub>-Subunit Antibody

Catalog #: 863A-GB3C**

Cite this Antibody: PhosphoSolutions Cat# 863A-GB3C, RRID:AB_2650497

Host Applications Species Tested Species Reactivity* Molecular Weight
Rabbit WB 1:1000 M, R
IHC 1:300

** This antibody is a replacement for our original catalog # 863-GB3C. It was produced by the same methods, using the same fusion protein antigen in new animals.

Product Description: Affinity purified rabbit polyclonal antibody.

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 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<sub>A</sub>-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; Pöltl et al., 2003).

Antigen: Fusion protein from the cytoplasmic loop of the β<sub>3</sub>-subunit of rat GABA<sub>A</sub> receptor.

Antibody Specificity: Specific for endogenous levels of the ~53 kDa β<sub>3</sub>-subunit of the GABA<sub>A</sub> receptor.

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

Quality Control Tests: Western blots performed on each lot.

Packaging: 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

Storage and Stability: Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

Application Key: WB = Western Blot  IF = Immunofluorescence  IHC = Immunohistochemistry  IP = Immunoprecipitation
Species Reactivity Key: All=All Species  A-Avian  Amp=Amphibian  Ar=Arabidopsis  B=Bovine  C=Canine  Ch=Chicken  D=Drosophila  GP=Guinea Pig  H=Human  Ha=Hamster  M-Mouse  NHP=Non-human primate  P=Pig  R=Rat  S=Sheep  X-Xenopus  Z=Zebrafish
*Species assumed based on 100% homology with sequence used as antigen

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Product Specific References:


***Product specific references for previous product # 863-GB3C which has been depleted and replaced with our product # 863A-GB3C which was produced by the same methods, using the same fusion protein antigen in new animals.

General References:


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