

Anti-GABA_A Receptor, δ -Subunit, N-Terminus



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Catalog #: 868A-GDN

Size: 100 μ l

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* This antibody is a replacement for our original catalog # 868-GDN. It was produced by the same methods, using the same fusion protein antigen in new animals.

Cite this Antibody: PhosphoSolutions Cat# 868A-GDN, RRID:AB_

Host	Applications	Species Tested	Species Reactivity*	Molecular Reference
Rabbit	WB 1:1000	M, R		~50 kDa

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⁻ 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, co-expression 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). More recently there have been a number of studies demonstrating that the δ -subunit of the receptor may affect subunit assembly (Korpi et al., 2002) and may also confer differential sensitivity to neurosteroids and to ethanol (Wallner et al., 2003; Wohlfarth et al., 2002).

Antigen: Fusion protein from the N-terminus of the δ -subunit of rat GABA_A receptor.

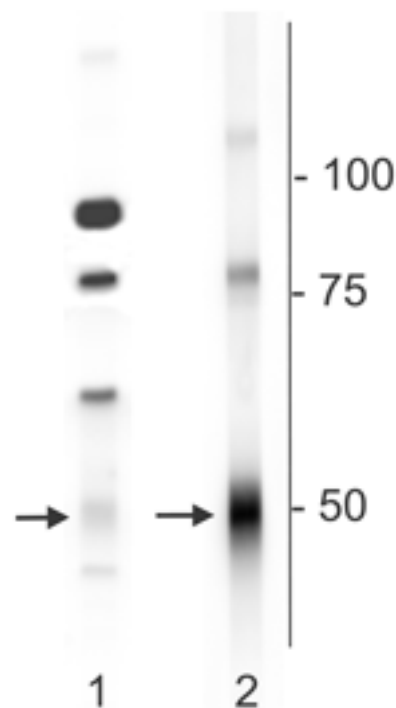
Antibody Specificity: Specific for endogenous levels of the ~50 kDa δ -subunit of the GABA_A receptor.

Purification Method: Prepared from pooled rabbit serum by affinity purification via chromatography on fusion protein immunogen column.

Quality Control Tests: Western blots performed on each lot.

Packaging: 100 μ l in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 μ g 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.



Western blot of mouse whole brain (1) and mouse synaptic plasma membrane (2) lysates showing specific immunolabeling of the ~50 kDa δ -subunit of the GABA_A-R.

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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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General References:

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