

Anti-GABAA Receptor a1, N-Terminus Antibody

Our Anti-GABAA Receptor $\alpha 1$, N-Terminus primary antibody from PhosphoSolutions is rabbit polyclonal. Catalog # AN1391

Specification

Anti-GABAA Receptor α1, N-Terminus Antibody - Product Information

Application WB
Primary Accession P62813
Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 51754

Anti-GABAA Receptor a1, N-Terminus Antibody - Additional Information

Gene ID **29705**

Other Names

ECA4 antibody, EIEE19 antibody, EJM antibody, EJM5 antibody, Gaba receptor alpha 1 polypeptide antibody, GABA(A) receptor antibody, GABA(A) receptor subunit alpha 1 antibody, GABA(A) receptor subunit alpha-1 antibody, GABA(A) receptor, alpha 1 antibody, GABRA 1 antibody, GABRA 1 antibody, GABRA 1 antibody, Gamma aminobutyric acid A receptor alpha 1 antibody, Gamma aminobutyric acid A receptor alpha 1 antibody, Gamma aminobutyric acid type A receptor alpha1 subunit antibody

Target/Specificity

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 CI- 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 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-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; Pöltl et al., 2003).

Dilution WB~~1:1000

Format

Antigen Affinity Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions



Anti-GABAA Receptor $\alpha 1$, N-Terminus Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

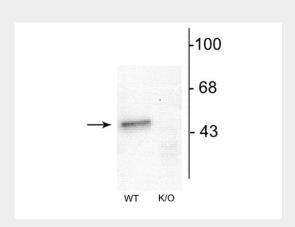
Shipping Blue Ice

Anti-GABAA Receptor α1, N-Terminus Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GABAA Receptor a1, N-Terminus Antibody - Images



Western blot of mouse forebrain lysates from Wild Type (WT) and $\alpha 1$ -knockout (K/O) animals showing specific immunolabeling of the ~ 51 kDa $\alpha 1$ -subunit of the GABAA-R. The labeling was absent from a lysate prepared from $\alpha 1$ -knockout animals.

Anti-GABAA Receptor α1, N-Terminus Antibody - Background

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 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-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; Pöltl et al., 2003).