

ARG52287 anti-GABAA Receptor alpha 1 antibody

Package: 50 µl
Store at: -20°C

Summary

| | |
|---------------------|---|
| Product Description | Rabbit Polyclonal antibody recognizes GABAA Receptor alpha 1 |
| Tested Reactivity | Ms, Rat |
| Predict Reactivity | Hu, Bov, Dog, NHuPm |
| Tested Application | WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | GABAA Receptor alpha 1 |
| Species | Rat |
| Immunogen | Synthetic peptide corresponding to amino acid residues from the N-terminal region conjugated to KLH |
| Conjugation | Un-conjugated |
| Alternate Names | A; EJM; EIEE19; EJM5; Gamma-aminobutyric acid receptor subunit alpha-1; ECA4; GABA |

Application Instructions

| Application table | <table><thead><tr><th>Application</th><th>Dilution</th></tr></thead><tbody><tr><td>WB</td><td>1:1,000</td></tr></tbody></table> | Application | Dilution | WB | 1:1,000 |
|-------------------|---|-------------|----------|----|---------|
| Application | Dilution | | | | |
| WB | 1:1,000 | | | | |
| Application Note | <p>Specific for the ~51k α1-subunit of the GABAA receptor in Western blots of Rat brain. Labeling is absent in α1-subunit knockout animals.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p> | | | | |

Properties

| | |
|---------------------|---|
| Form | Liquid |
| Purification | Affinity Purified |
| Buffer | 10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol |
| Stabilizer | 0.1 mg/ml BSA, 50% Glycerol |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

Database links [GeneID: 14394 Mouse](#)
[GeneID: 29705 Rat](#)
[Swiss-port # P62812 Mouse](#)
[Swiss-port # P62813 Rat](#)

Gene Symbol GABRA1

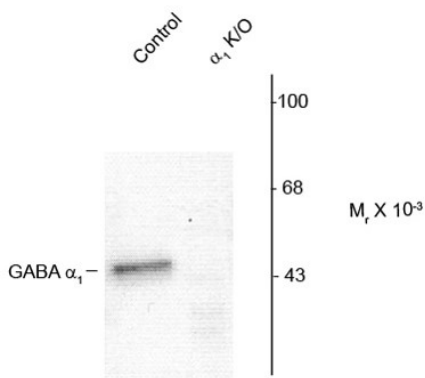
Gene Full Name gamma-aminobutyric acid (GABA) A receptor, alpha 1

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 GABAA receptor (GABAA-R) subtype. GABAA-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 GABAA-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 GABAA-Rs sensitive to GABA. However, coexpression of a γ -subunit is required for benzo-diazepine 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).

Research Area Neuroscience antibody

Calculated Mw 52 kDa

Images



ARG52287 anti-GABAA Receptor alpha 1 antibody WB image

Western blot: 5-7 μ g of Mouse cerebellum lysates from wild type (control) and alpha 1 knockout (alpha 1 K/O) animals showing specific immunolabeling of the ~51k alpha 1-subunit of the GABAA-R in the wild type but not in the alpha 1 K/O animals when stained with ARG52287 anti-GABAA Receptor alpha 1 antibody.