ARG52286
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, Ms, Bov, Dog, NHuPrm
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GABAA Receptor alpha 1
Species	Rat
Immunogen	Fusion protein from the cytoplasmic loop of the alpha 1 subunit
Conjugation	Un-conjugated
Alternate Names	A; EJM; EIEE19; EJM5; Gamma-aminobutyric acid receptor subunit alpha-1; ECA4; GABA

Application Instructions

Application table

Application	Dilution
WB	1:1,000

Application Note: Specific for the ~51k α1-subunit of the GABAA receptor in Western blots. Labeling is absent in α1-subunit knockout animals.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

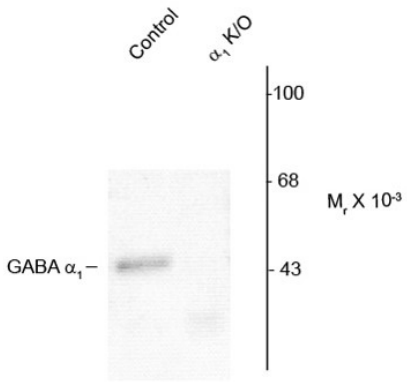
Properties

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 sub-stance abuse. The GABAA-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 GABAA-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).
Research Area	Neuroscience antibody
Calculated Mw	52 kDa

Images



ARG52286 anti-GABAA Receptor alpha 1 antibody WB image

Western blot: 5-7 µg of Mouse cerebellum lysates from wild type (control) and alpha 1 knockout (alpha 1 K/O) animals showing specific immunolabeling of the ~51 kDa alpha 1-subunit of the GABAA-R in the wild type but not in the alpha 1 K/O animals when stained with ARG52286 anti-GABAA Receptor alpha 1 antibody.