

## 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	<p>Specific for the ~51k α1-subunit of the GABAA receptor in Western blots. 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>	

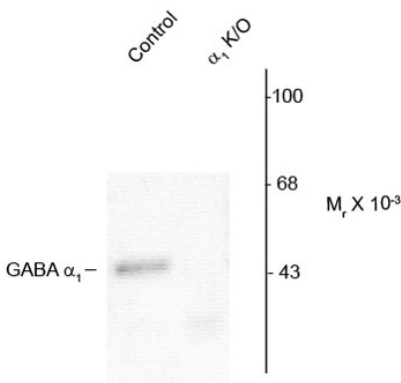
### Properties

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	<a href="#">GeneID: 14394 Mouse</a> <a href="#">GeneID: 29705 Rat</a> <a href="#">Swiss-port # P62812 Mouse</a> <a href="#">Swiss-port # P62813 Rat</a>
Gene Symbol	GABRA1
Gene Full Name	gamma-aminobutyric acid (GABA) A receptor, alpha 1
Background	<p>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 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 <math>\alpha</math>s, four <math>\beta</math>s and four <math>\gamma</math>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 <math>\alpha</math>- and <math>\beta</math>-subunits results in the expression of functional GABAA-Rs sensitive to GABA. However, coexpression of a <math>\gamma</math>-subunit is required for benzodiazepine modulation. The various effects of the benzodiazepines in brain may also be mediated via different <math>\alpha</math>- subunits of the receptor (McKernan et al., 2000; Mehta and Ticku, 1998; Ogris et al., 2004; Pörtl et al., 2003).</p>
Research Area	Neuroscience antibody
Calculated Mw	52 kDa

Images



ARG52286 anti-GABAA Receptor alpha 1 antibody WB image

Western blot: 5-7  $\mu$ g 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.