

## ARG52288 anti-GABAA Receptor alpha 2 antibody

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes GABAA Receptor alpha 2
Tested Reactivity	Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GABAA Receptor alpha 2
Species	Rat
Immunogen	Fusion protein from the cytoplasmic loop of the alpha 2 subunit
Conjugation	Un-conjugated
Alternate Names	A; Gamma-aminobutyric acid receptor subunit alpha-2; GABA

### Application Instructions

Application table	Application	Dilution
	WB	1:1,000
Application Note	<p>Specific for the ~51k α2-subunit of the GABAA receptor in Western blots. Labeling is absent in α2-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: 14395 Mouse</a>
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[GeneID: 289606 Rat](#)

[Swiss-port # P26048 Mouse](#)

## 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  $\text{Cl}^-$  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  $\alpha$ s, four  $\beta$ s and four  $\gamma$ 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  $\alpha$ - and  $\beta$ -subunits results in the expression of functional GABAA-Rs sensitive to GABA. However, coexpression of a  $\gamma$ -subunit is required for benzodiazepine modulation. The various effects of the benzodiazepines in brain may also be mediated via different  $\gamma$ -subunits of the receptor (McKernan et al., 2000; Mehta and Ticku, 1998; Ogris et al., 2004; Pörtl et al., 2003).

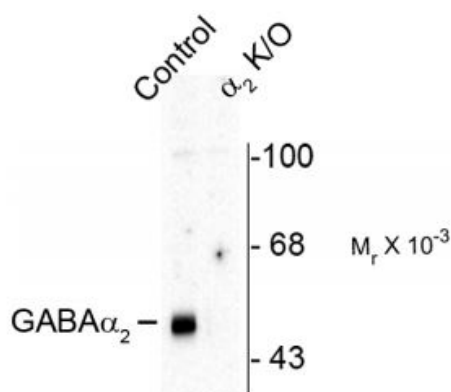
## Research Area

Neuroscience antibody

## Calculated Mw

51 kDa

## Images



ARG52288 anti-GABAA Receptor alpha 2 antibody WB image

Western blot: mouse brain lysates from wild type (Control) and  $\alpha$ 2-knockout ( $\alpha$ 2-K/O) animals stained with ARG52288 anti-GABAA Receptor alpha 2 antibody showing specific immunolabeling of the ~51k  $\alpha$ 2-subunit of the GABAA-R. The labeling was absent from a lysate prepared from  $\alpha$ 2-knockout animals.