ARG52301
anti-GABAA Receptor gamma 2 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GABAA Receptor gamma 2
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms, Chk, NHuPrm, Zfsh
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GABAA Receptor gamma 2
Species	Rat
Immunogen	Synthetic peptide corresponding to amino acid residues specific to the gamma 2 subunit conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	A; CAE2; ECA2; GEFSP3; Gamma-aminobutyric acid receptor subunit gamma-2; GABA

Application Instructions

Application table

Application	Dilution
IHC-P	1:400
WB	1:1,000

Application Note: Specific for the ~46k γ2-subunit of the GABAA receptor in Western blots of Rat brain extracts.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

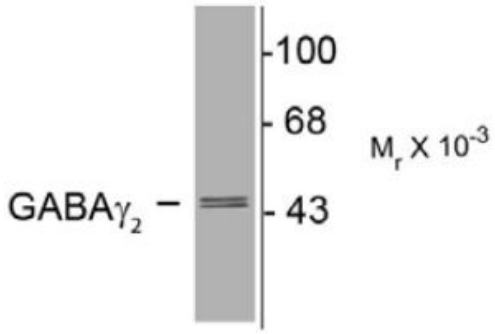
Properties

Form	Liquid
Purification	Neat Serum
Buffer	Neat serum
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 or below. 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

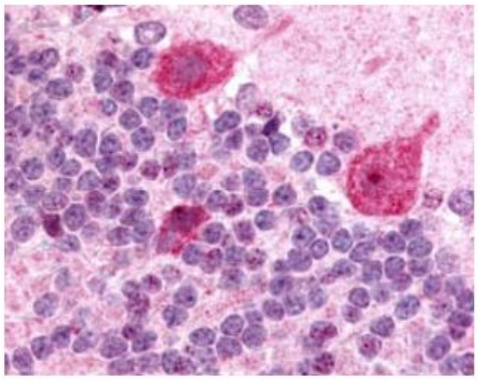
Database links	GeneID: 29709 Rat
	Swiss-port # P18508 Rat
Gene Symbol	GABRG2
Gene Full Name	gamma-aminobutyric acid (GABA) A receptor, gamma 2
Background	Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system, causing a hyperpolarization of the membrane 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 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, co-expression 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). Lastly, phosphorylation of β-subunits of the receptor has been shown to modulate GABAA-R function (Brandon et al., 2003).
Research Area	Neuroscience antibody
Calculated Mw	54 kDa
PTM	Palmitoylated by ZDHHC3/GODZ; which may affect presynaptic clustering and/or cell surface stability.

Images



ARG52301 anti-GABAA Receptor gamma 2 antibody WB image

Western blot: 10 µg of rat hippocampal lysate stained with ARG52301 anti-GABAA Receptor gamma 2 antibody showing immunolabeling of the ~46k γ2-subunit of the GABAA-R.



ARG52301 anti-GABAA Receptor gamma 2 antibody IHC image

Immunohistochemistry: rat cerebellum stained with ARG52301 anti-GABAA Receptor gamma 2 antibody showing labeling of GABAA g2 subunit in fuchsia.