ARG52289
anti-GABAA Receptor alpha 3 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GABAA Receptor alpha 3
Tested Reactivity	Ms, Rat
Predict Reactivity	Hu, Bov, Dog, NHuPrm, Zfsh
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GABAA Receptor alpha 3
Species	Rat
Immunogen	Synthetic peptide from the N-terminal region of the alpha 3 subunit
Conjugation	Un-conjugated
Alternate Names	A; Gamma-aminobutyric acid receptor subunit alpha-3; GABA

Application Instructions

Application table

Application	Dilution
IHC-P	1:100
WB	1:1000

Application Note: Specific for the ~51k α3-subunit of the GABAA receptor in Western blots. Labeling is absent in α3-subunit knockout animals.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

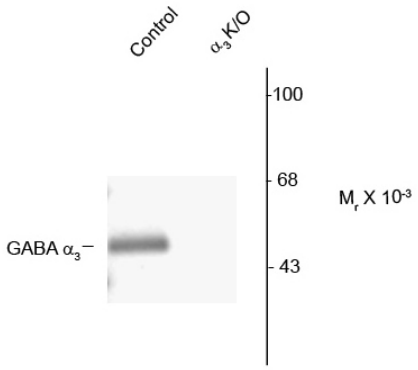
Properties

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: 14396 Mouse GeneID: 24947 Rat Swiss-port # P26049 Mouse
Gene Symbol	GABRA3
Gene Full Name	gamma-aminobutyric acid (GABA) A receptor, alpha 3
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 Clchannel 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, 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	55 kDa

Images



ARG52289 anti-GABAA Receptor alpha 3 antibody WB image

Western Blot: Rat brain lysates from wild type (Control) and a3-knockout (a3-K/O) animals showing specific immunolabeling of the ~51k a3-subunit of the GABAA-R stained with GABA A Receptor alpha 3 Antibody (ARG52289). The labeling was absent from a lysate prepared from a3-knockout animals.

ARG52289 anti-GABAA Receptor alpha 3 antibody IHC image

Immunohistochemistry: rat amygdala stained with ARG52289 anti-GABAA Receptor alpha 3 antibody showing labeling of GABAA alpha 3 subunit.