Datasheet for ABIN6658225

anti-GABRB3 antibody (Cytoplasmic Loop)

2 Images

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Overview

Quantity:	100 µL
Target:	GABRB3
Binding Specificity:	Cytoplasmic Loop
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GABRB3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	Immunogen: Anti-GABA(A) Receptor beta 3 Antibody was produced by repeated immunizations with recombinant fusion protein from the cytoplasmic loop of the beta 3 subunit. Immunogen Type: Recombinant Protein
Isotype:	IgG
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Cross-Reactivity (Details):	Cross reactivity with GABA(A) Receptor beta 3 from other species has not been determined.
Purification:	Anti-GABA(A) Receptor beta 3 Antibody is directed against rat GABA(A) Receptor beta 3. The antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity is expected from the following species based on 100% sequence homology: mouse.

Target Details

Target:	GABRB3
Alternative Name:	GABA(A) Receptor beta 3 (GABRB3 Products)
Background:	Synonyms: Gamma-aminobutyric acid receptor subunit beta-3, GABA(A) receptor subunit beta-3, Gabrb3 Background: Anti-GABA(A) Receptor beta 3 Antibody detects GABA(A) Receptor beta 3. 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. 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. GABA(A) receptor beta 3 antibody is ideal for investigators involved in Neuroscience. Gene Name: GABRB3
Gene ID:	24922
NCBI Accession:	NP_058761
UniProt:	P63079
Pathways:	Sensory Perception of Sound

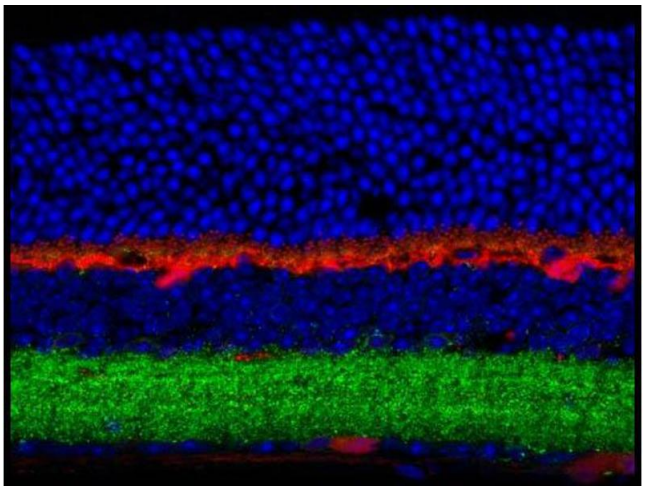
Application Details

Application Notes:	Immunohistochemistry Dilution: User Optimized Application Note: Anti-GABA(A) Receptor beta 3 (Rabbit) antibody suitable for use in Western Blotting and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 53 kDa in size corresponding to the beta 3 subunit of GABA A receptor in the appropriate cell lysate or extract. Western Blot Dilution: 1:1000
Restrictions:	For Research Use only

Handling

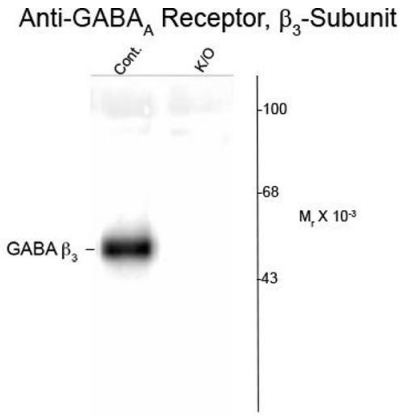
Format:	Liquid
Buffer:	Buffer: 0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5 Stabilizer: 0.1 mg/mL Bovine Serum Albumin (BSA) - IgG and Protease free, 50 % (v/v) Glycerol
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.

Images



Immunohistochemistry

Image 1. Immunohistochemistry of Anti-GABA(A) Receptor beta 3 (Rabbit) Antibody Immunohistochemistry of Anti-GABA(A) Receptor beta 3 (Rabbit) Antibody. Tissue: mouse retina. Labeling: GABA(A) Receptor beta 3 subunit in green, calbindin in red, and DNA in blue.



Western blot of 5-7 µg of mouse cerebellum lysates from wild type (control) and β_3 knockout (β_3 K/O) animals showing specific immunolabeling of the ~53k β_3 subunit of the GABA$_A$-R in the wild type but not in the β_3 K/O animals.

Western Blotting

Image 2. Western blot of GABAA Receptor ß3 Antibody Western Blot of Rabbit anti-GABAA Receptor ß3 Antibody. Lane 1: mouse cerebellum lysates from wild type. Lane 2: mouse cerebellum lysates from β3 knockout (β3 K/O). Load: 5-7 µg per lane. Primary antibody: GABAA-R antibody at 1:400 for overnight at 4°C. Secondary antibody: rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~53kDa/~53kDa for β3-subunit of the GABAA-R in the wild type. Other band(s): none.