

## Datasheet for ABIN7581873

# anti-GABRB2 antibody (Intracellular)



### Overview

Quantity:	50 μL
Target:	GABRB2
Binding Specificity:	AA 405-419, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GABRB2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

## **Product Details**

Purpose:	A Rabbit Polyclonal antibody to GABA(A) β2 Receptor
Immunogen:	(C)KAGLPRHSFGRNALE, corresponding to amino acid residues 405 - 419 of rat GABRB2
Sequence:	(C)KAGLPRHSFG RNALE
Isotype:	IgG
Specificity:	Intracellular, 2nd loop.
Predicted Reactivity:	Mouse,Human - identical
Characteristics:	Anti-GABA(A) β2 Receptor Antibody (ABIN7581873) is a highly specific antibody directed against an epitope of the rat protein. The antibody can be used in western blot and immunohistochemistry applications. It has been designed to recognize GABA(A) Receptor Beta 2 from rat, mouse and human samples.

# Product Details Purification:

Affinity purified on immobilized antigen.

## **Target Details**

GABRB2
GABRB2 (GABRB2 Products)
Gamma-Aminobutyric Acid Receptor Subunit Beta-2, GABA(A) receptor subunit beta-2, GABA(A)

Receptor Beta 2, GABRB2,GABA receptors have two main subtypes: GABA(A) and GABA(B) receptors based on their amino acid sequence and structure. The GABA(A) receptors are ionotropic receptors while the GABA(B) receptors are metabotropic G-protein coupled receptors1.GABA(A) receptors are ion channels opened when GABA or its selective agonist muscimol binds to the receptor. In contrast, when the competitive antagonists bicuculline or gabazine binds to the GABA(A) receptors, the GABA-evoked current is decreased. GABA(A) receptors are blocked with picrotoxin, a non-competitive blocker, that blocks the GABA(A) receptor pore. Benzodiazepines and barbiturates are positive allosteric modulators of GABA(A) receptors and can enhance the currents of these channels 2-4. To date, 19 GABA(A) receptor subunits have been identified:  $\alpha$  1-6,  $\beta$  1-3,  $\gamma$ 1-3,  $\delta$ ,  $\epsilon$ ,  $\theta$ , p and ? 1-34. GABA(A)receptors are heteropentameric complexes formed by combinations of different GABA(A) receptor subunits 4.The major isoform of the GABA(A) receptor in the brain is composed of two  $\alpha 1$ , two  $\beta 2$ , and one y2 subunits that are encoded by the GABRA1, GABRB2, and GABRG2 genes respectively, accounting for 43 % of the GABA receptors in the mammalian brain 5. It is then not surprising that GABA(A) Receptor Beta 2, has been associated with several neuropsychiatric disorders such as schizophrenia, bipolar disorder, epilepsy, autism spectrum disorder, Alzheimer's disease, frontotemporal dementia and depression 5.

Gene ID:	25451
UniProt:	P63138
Pathways:	Sensory Perception of Sound, Synaptic Membrane

## **Application Details**

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody
	Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:200
	Application Dilutions Western blot wb: 1:200
Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C.  Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week.  For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).