

Datasheet for ABIN7043196
anti-GABBR2 antibody (Intracellular)



[Go to Product page](#)

2 Images

Overview

Quantity:	50 µL
Target:	GABBR2
Binding Specificity:	AA 875-894, Intracellular
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GABBR2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to GABA(B) Receptor 2
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: CKDPIEDINSPEHIQRRLSL, corresponding to amino acid residues 875-894 of human GABBR2
Isotype:	IgG
Specificity:	Intracellular, C-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Rat,mouse,bovine - identical
Characteristics:	Anti-GABA(B) R2 Antibody is directed against an epitope of the human GABA(B) receptor 2. Anti-GABA(B) R2 Antibody (ABIN7043196 and ABIN7044321), can be used in western blot and

Product Details

immunohistochemistry applications. It has been designed to recognize GABBR2 from human, rat, and mouse samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: GABBR2

Alternative Name: GABBR2 ([GABBR2 Products](#))

Background: γ -Aminobutyric acid type B receptor subunit 2, GABA B receptor 2, GABABR2, Gb2, GABBR2, GPR51, GPRC3B, HG20, GABA (gamma-aminobutyric acid) is the major inhibitory neurotransmitter in the central nervous system and plays a crucial role in the modulation of neuronal activity.^{1,2} The GABA transmitter interacts with three types of receptors: the ionotropic receptors, GABA(A) R and GABA(C) R, and the metabotropic GABA(B) receptor, [GABA(B) R].³ The latter belongs to the G-protein coupled receptor (GPCR) superfamily and mediates slow synaptic inhibition in the brain and spinal cord.^{1,4} The functional GABA(B) receptor is a heterodimer consisting of two subunits, the GABA(B) R1 and the GABA(B) R2. These subunits were demonstrated to have complementary roles essential for the functional receptor.^{5,6} GABA(B) R2 has been shown to be essential for trafficking and for G-protein binding while the GABA(B) R1 subunit has been demonstrated to be important for agonist and antagonist binding. GABA(B) R2 is highly expressed in the brain, especially in the cerebral cortex, thalamus, and hippocampus, spinal cord, and, to a lesser extent, in the testis.⁷

Alternative names: GABA(B) R2, gamma-Aminobutyric acid type B receptor subunit 2, GABA B receptor 2, GABABR2, Gb2, GABBR2, GPR51, GPRC3B, HG20

Gene ID: 9568

NCBI Accession: [NM_005458](#)

UniProt: [O75899](#)

Pathways: [cAMP Metabolic Process](#)

Application Details

Application Notes: Antigen preadsorption control: 1 μ g peptide per 1 μ g antibody
Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:100
Application Dilutions Western blot wb: 1:200

Application Details

Comment:

Cited Application: IP

Negative Control: (ABIN7235527)

Blocking Peptide: (ABIN7235527)

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:

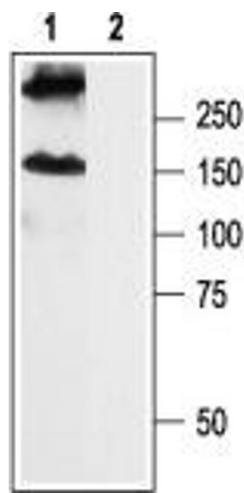
4 °C,-20 °C

Storage Comment:

Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C.

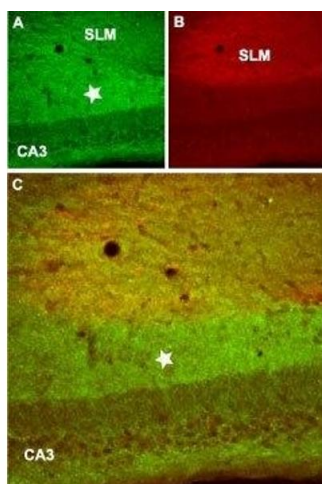
Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of rat brain membrane: -
1. Anti-GABA(B) R2 Antibody (ABIN7043196 and ABIN7044321), (1:200).2. Anti-GABA(B) R2 Antibody, preincubated with GABA(B) R2 Blocking Peptide (#BLP-GB002).



Immunohistochemistry

Image 2. Expression of GABA(B) receptor 2 in mouse hippocampus - Immunohistochemical staining of mouse hippocampus frozen sections using Anti-GABA(B) R2 Antibody (ABIN7043196 and ABIN7044321), (1:100). A. GABBR2 staining (green) is detected in layers including the stratum lacunosum moleculare (SLM) and stratum radiatum of the CA3 layer (star). B. Staining with mouse anti-GAP43 antibody (red) sets apart the SLM. C. Confocal merge suggests the presence of GABBR2 in layers, but not in pyramidal neurons.