Anti-GABA B Receptor 2 Antibody [JU31-32] - BSA and Azide free

HA751832

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	WB, IHC-P, IHC-Fr, IF-Tissue
Molecular Wt:	Predicted band size: 106 kDa
Clone number:	JU31-32

Description: In the central nervous system (CNS), gamma-aminobutyric acid (GABA) is the main main inhibitory neurotransmitter that functions to regulate neuronal firing. GABA exerts its effects through two different kinds of receptors: ionotropic receptors (GABAA R and GABAC R), which produce fast inhibitory signals, and metabotropic receptors (GABAB R), which produce slow inhibitory signals. The GABAB R receptor is a heterodimer that consists of two multi-pass membrane proteins, designated GABAB R1 and GABAB R2, both of which belong to the G protein-coupled receptor family and are highly expressed in brain tissue. Together, GABAB R1 and GABAB R2 play a crucial role in the fine-tuning of inhibitory synaptic transmissions and are implicated in slow wave sleep, muscle relaxation, hippocampal long-term potentiation and antinociception events. Both GABAB R1 and GABAB R2 are regulated by G proteins that have a variety of functions, including activation of potassium channels, inhibition of adenylyl cyclase (A cyclase) activity and modulation of inositol phospholipid hydrolysis.

Immunogen: Recombinant protein within C-terminal Human GABA B Receptor 2 .

Positive control: Mouse brain tissue lysate, rat brain tissue lysate, mouse brain tissue, rat brain tissue, mouse cerebellum tissue, SH-SY-5Y.

Subcellular location: Plasma membrane.

Database links: SwissProt: O75899 Human | Q80T41 Mouse | O88871 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000
IHC-Fr	1:500-1:1,000
IF-Tissue	1:500

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

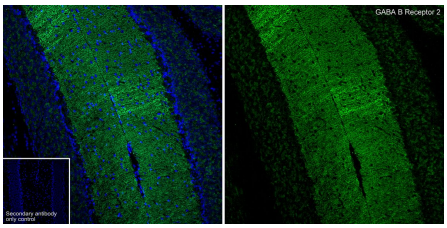

Fig1: Application: IHC-Fr

Species: Mouse

Site: Cerebellum

Sample: Frozen section

Antibody concentration: 1:1,000

Antigen retrieval: Not required

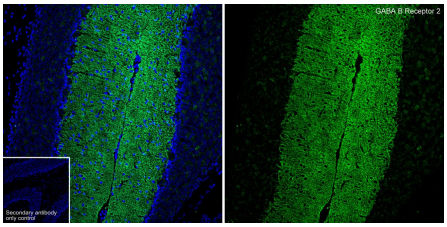

Fig2: Application: IHC-Fr

Species: Rat

Site: Cerebellum

Sample: Frozen section

Antibody concentration: 1:1,000

Antigen retrieval: Not required

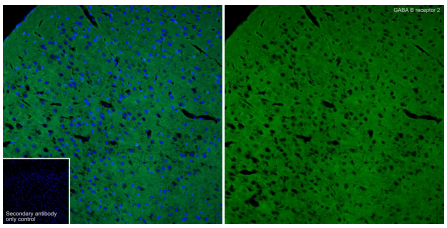

Fig3: Application: IHC-Fr

Species: Mouse

Site: Cerebral cortex

Sample: Frozen section

Antibody concentration: 1:500

Antigen retrieval: Not required

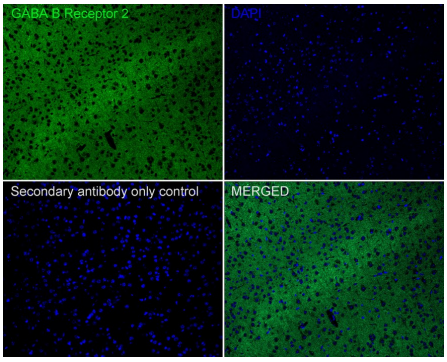

Fig4: Application: IF-tissue

Species: Mouse

Site: Cerebral cortex

Sample: Paraffin-embedded section

Antibody concentration: 1:500

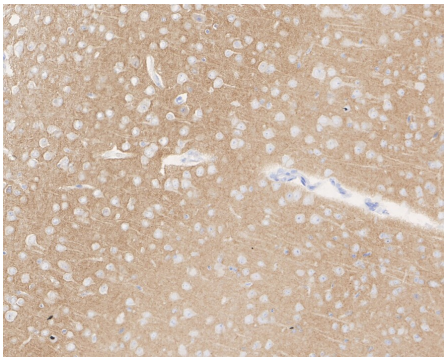

Fig5: Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-GABA B Receptor 2 antibody (HA751832) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA751832) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

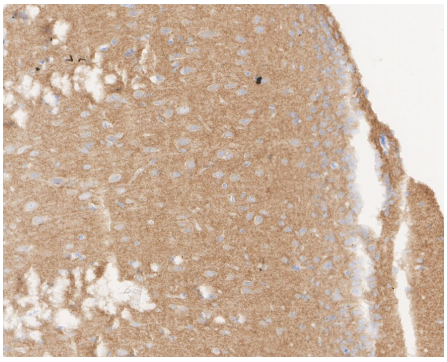

Fig6: Immunohistochemical analysis of paraffin-embedded rat brain tissue with Rabbit anti-GABA B Receptor 2 antibody (HA751832) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA751832) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

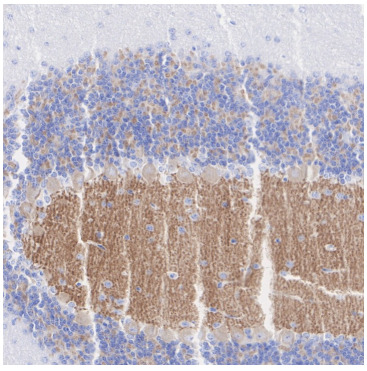

Fig7: Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rabbit anti-GABA B Receptor 2 antibody (HA751832) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA751832) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

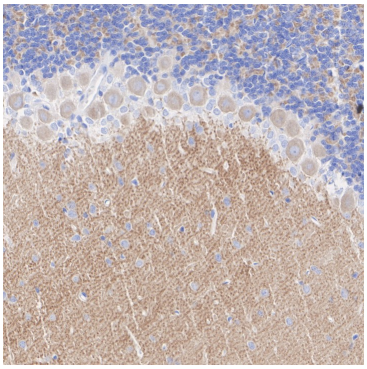

Fig8: Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Rabbit anti-GABA B Receptor 2 antibody (HA751832) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA751832) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

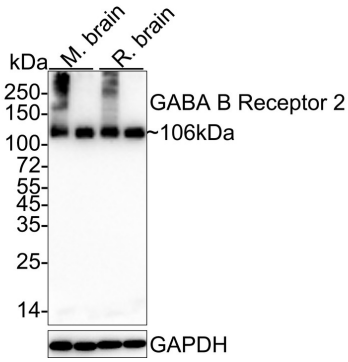

Fig9: Western blot analysis of GABA B Receptor 2 on different lysates with Rabbit anti-GABA B Receptor 2 antibody (HA751832) at 1/1,000 dilution.

Lane 1: Mouse brain tissue lysate
Lane 2: Mouse brain tissue lysate (no heat)
Lane 3: Rat brain tissue lysate
Lane 4: Rat brain tissue lysate (no heat)

Notice: no heat means the lysate is not boiled.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 106 kDa
Observed band size: 106 kDa

Exposure time: 30 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751832) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Background References

1. White J H et al. Heterodimerization is required for the formation of a functional GABA(B) receptor. Nature 396:679-682 (1998).
2. Martin S C et al. Molecular identification of the human GABABR2: cell surface expression and coupling to adenylyl cyclase in the absence of GABABR1. Mol Cell Neurosci 13:180-191 (1999).