

GABA B Receptor 2 Antibody
Rabbit mAb
Catalog # AP91679

Specification

GABA B Receptor 2 Antibody - Product Information

Application	WB, IHC, FC, ICC
Primary Accession	075899
Reactivity	Rat
Clonality	Monoclonal
Other Names	
GAB B R2; GABA-BR2; GABABR2; GABB R2; Gabbr2; Gb2; GPR51; GPRC 3B; HG20; R2 SUBUNIT;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	105821 Da

GABA B Receptor 2 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human GABA B Receptor 2
Description	Receptor for GABA. The activity of this receptor is mediated by G-proteins that inhibit adenylyl cyclase activity, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipids hydrolysis. Plays a critical role in the fine-tuning of inhibitory synaptic transmission.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

GABA B Receptor 2 Antibody - Protein Information

Name GABBR2

Synonyms GPR51, GPRC3B

Function

Component of a heterodimeric G-protein coupled receptor for GABA, formed by GABBR1 and

GABBR2 (PubMed:15617512, PubMed:18165688, PubMed:22660477, PubMed:24305054, PubMed:9872316, PubMed:9872744). Within the heterodimeric GABA receptor, only GABBR1 seems to bind agonists, while GABBR2 mediates coupling to G proteins (PubMed:18165688). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase (PubMed:10075644, PubMed:10773016, PubMed:24305054). Signaling inhibits adenylate cyclase, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipid hydrolysis (PubMed:10075644, PubMed:10773016, PubMed:10906333, PubMed:9872744). Plays a critical role in the fine-tuning of inhibitory synaptic transmission (PubMed:22660477, PubMed:9872744). Pre-synaptic GABA receptor inhibits neurotransmitter release by down-regulating high-voltage activated calcium channels, whereas postsynaptic GABA receptor decreases neuronal excitability by activating a prominent inwardly rectifying potassium (Kir) conductance that underlies the late inhibitory postsynaptic potentials (PubMed:10075644, PubMed:22660477, PubMed:9872316, PubMed:9872744). Not only implicated in synaptic inhibition but also in hippocampal long-term potentiation, slow wave sleep, muscle relaxation and antinociception (Probable).

Cellular Location

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane {ECO:0000250|UniProtKB:O88871}; Multi-pass membrane protein. Note=Coexpression of GABBR1 and GABBR2 is required for GABBR1 maturation and transport to the plasma membrane. In contrast, GABBR2 does not depend on GABBR1 for transport to the cell membrane

Tissue Location

Highly expressed in brain, especially in cerebral cortex, thalamus, hippocampus, frontal, occipital and temporal lobe, occipital pole and cerebellum, followed by corpus callosum, caudate nucleus, spinal cord, amygdala and medulla (PubMed:10087195, PubMed:10328880, PubMed:10727622, PubMed:9872744). Weakly expressed in heart, testis and skeletal muscle (PubMed:10087195, PubMed:10727622)

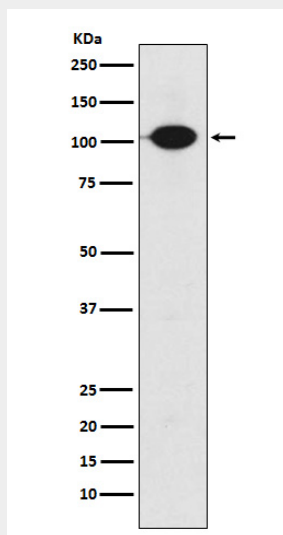
GABA B Receptor 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GABA B Receptor 2 Antibody - Images



Western blot analysis of GABA B Receptor 2 expression in SH-SY5Y cell lysate.