

**Anti-GABBR2 (pS893) Antibody**  
Rabbit polyclonal antibody to GABBR2 (pS893)  
Catalog # AP61281

### Specification

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#### Anti-GABBR2 (pS893) Antibody - Product Information

Application	WB
Primary Accession	<a href="#">O75899</a>
Other Accession	<a href="#">Q80T41</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	105821

#### Anti-GABBR2 (pS893) Antibody - Additional Information

Gene ID 9568

#### Other Names

GPR51; GPRC3B; Gamma-aminobutyric acid type B receptor subunit 2; GABA-B receptor 2; GABA-B-R2; GABA-BR2; GABABR2; Gb2; G-protein coupled receptor 51; HG20

#### Target/Specificity

Recognizes endogenous levels of GABBR2 (pS893) protein.

#### Dilution

WB~~WB (1/500 - 1/1000)

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

#### Anti-GABBR2 (pS893) 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](http://www.uniprot.org/citations/15617512) target="\_blank">15617512</a>, PubMed: [18165688](http://www.uniprot.org/citations/18165688) target="\_blank">18165688</a>, PubMed: [22660477](http://www.uniprot.org/citations/22660477) target="\_blank">22660477</a>, PubMed: [24305054](http://www.uniprot.org/citations/24305054) target="\_blank">24305054</a>, PubMed: [9872316](http://www.uniprot.org/citations/9872316) target="\_blank">9872316</a>)

target="\_blank">9872316</a>, PubMed:<a href="http://www.uniprot.org/citations/9872744" target="\_blank">9872744</a>). Within the heterodimeric GABA receptor, only GABBR1 seems to bind agonists, while GABBR2 mediates coupling to G proteins (PubMed:<a href="http://www.uniprot.org/citations/18165688" target="\_blank">18165688</a>). 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:<a href="http://www.uniprot.org/citations/10075644" target="\_blank">10075644</a>, PubMed:<a href="http://www.uniprot.org/citations/10773016" target="\_blank">10773016</a>, PubMed:<a href="http://www.uniprot.org/citations/24305054" target="\_blank">24305054</a>). Signaling inhibits adenylate cyclase, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipid hydrolysis (PubMed:<a href="http://www.uniprot.org/citations/10075644" target="\_blank">10075644</a>, PubMed:<a href="http://www.uniprot.org/citations/10773016" target="\_blank">10773016</a>, PubMed:<a href="http://www.uniprot.org/citations/10906333" target="\_blank">10906333</a>, PubMed:<a href="http://www.uniprot.org/citations/9872744" target="\_blank">9872744</a>). Plays a critical role in the fine-tuning of inhibitory synaptic transmission (PubMed:<a href="http://www.uniprot.org/citations/22660477" target="\_blank">22660477</a>, PubMed:<a href="http://www.uniprot.org/citations/9872744" target="\_blank">9872744</a>). 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:<a href="http://www.uniprot.org/citations/10075644" target="\_blank">10075644</a>, PubMed:<a href="http://www.uniprot.org/citations/22660477" target="\_blank">22660477</a>, PubMed:<a href="http://www.uniprot.org/citations/9872316" target="\_blank">9872316</a>, PubMed:<a href="http://www.uniprot.org/citations/9872744" target="\_blank">9872744</a>). 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

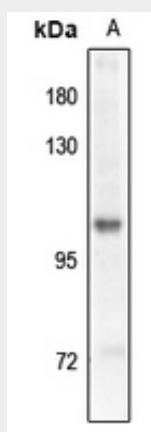
Highly expressed in brain, especially in cerebral cortex, thalamus, hippocampus, frontal, occipital and temporal lobe, occipital pole and cerebellum, followed by corpus callosum, caudate nucleus, spinal cord, amygdala and medulla (PubMed:10087195, PubMed:10328880, PubMed:10727622, PubMed:9872744). Weakly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

### Anti-GABBR2 (pS893) 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](#)

### Anti-GABBR2 (pS893) Antibody - Images



Western blot analysis of GABBR2 (pS893) expression in U87MG (A) whole cell lysates.

#### **Anti-GABBR2 (pS893) Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GABBR2 (pS893). The exact sequence is proprietary.