

Rabbit GABBR2 Polyclonal Antibody | anti-GABBR2 antibody

GABBR2 Antibody (C-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA289091	Rabbit	Human, Mouse, (Predicted Reactivity: Rat)	Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

GABBR2; Polyclonal Antibody; GABBR2 Antibody (C-term); 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; GPR51; GPRC3B; anti-GABBR2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, (Predicted Reactivity: Rat)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This GABBR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 861-890 amino acids from the C-terminal region of human GABBR2.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Positions	861-890
Sequence Length	941
Applicable Applications for anti-GABBR2 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Function	Component of a heterodimeric G-protein coupled receptor for GABA, formed by GABBR1 and GABBR2. Within the heterodimeric GABA receptor, only GABBR1 seems to bind agonists, while GABBR2 mediates coupling to G proteins. 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. Signaling inhibits adenylate cyclase, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium channels and modulates inositol phospholipid hydrolysis. Plays a critical role in the fine-tuning of inhibitory synaptic transmission. 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. Not only implicated in synaptic inhibition but also in hippocampal long-term potentiation, slow wave sleep, muscle relaxation and antinociception.
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; 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. Weakly expressed in heart, testis and skeletal muscle.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohistochemisry)
GABBR2 antibody (C-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GABBR2 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
GABBR2 Antibody (C-term) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the GABBR2 antibody detected the GABBR2 protein (arrow).



WB (Western Blot)
GABBR2 Antibody (C-term) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the GABBR2 antibody detected the GABBR2 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-GABBR2 antibody	The multi-pass membrane protein encoded by this gene belongs to the G-protein coupled receptor 3 family and GABA-B receptor subfamily. The GABA-B receptors inhibit neuronal activity through G protein-coupled second-messenger systems, which regulate the release of neurotransmitters, and the activity of ion channels and adenylyl cyclase. This receptor subunit forms an active heterodimeric complex with GABA-B receptor subunit 1, neither of which is effective on its own. Allelic variants of this gene have been associated with nicotine dependence.
Product Categories/Family for anti-GABBR2 antibody	Neuroscience; GPCR Antibodies
References	Oblak, A.L., et al. J. Neurochem. 114(5):1414-1423(2010) Letra, A., et al. Am. J. Med. Genet. A 152A (7), 1701-1710 (2010) : Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) : Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :

NCBI AND UNIPROT INFORMATION

NCBI GI #	40255245
NCBI GeneID	9568
NCBI Accession #	NP_005449.5
NCBI GenBank Nucleotide #	NM_005458.7
UniProt Accession #	O75899; O75974; O75975; Q5VXZ2; Q8WX04; Q9P1R2; Q9UNR1; Q9UNS9
Molecular Weight	105821
NCBI Official Full Name	gamma-aminobutyric acid type B receptor subunit 2
NCBI Official Synonym Full Names	gamma-aminobutyric acid (GABA) B receptor, 2
NCBI Official Symbol	GABBR2
NCBI Official Synonym Symbols	HG20; GPR51; GPRC3B; GABABR2; HRIHFB2099
NCBI Protein Information	gamma-aminobutyric acid type B receptor subunit 2

UniProt Protein Name	Gamma-aminobutyric acid type B receptor subunit 2
UniProt Gene Name	GABBR2
UniProt Synonym Gene Names	GPR51; GPRC3B; GABA-B receptor 2; GABA-B-R2; GABA-BR2; GABABR2; Gb2
UniProt Entry Name	GABR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gabbr2-antibody-immunohistochemistry-western-blot-elisa/289091>