Rabbit GABBR1 Polyclonal Antibody | anti-GABBR1 antibody

GABBR1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325550	**Rabbit**	**Human, Mouse, Rat**	**ELISA, Immunocytochemistry, Immunofluorescence, Western Blot**

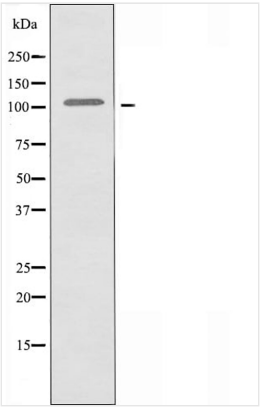
PRODUCT SYNONYMS

GABBR1; Polyclonal Antibody; GABBR1 Antibody; dJ271M21.1.1; dJ271M21.1.2; FLJ92613; GABA-B receptor 1; GABA-B-R1; GABA-BR1; GABAB R1; GABAB subunit 1c; GABABR1; GABBR1 3; GABR1_HUMAN; Gamma aminobutyric acid (GABA) B receptor 1; Gamma-aminobutyric acid type B receptor subunit 1; Gb1; GPRC3A; Seven transmembrane helix receptor; anti-GABBR1 antibody

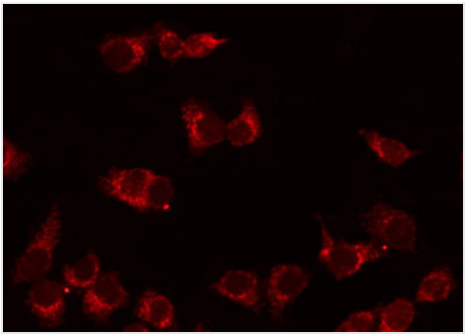
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	GABBR1 antibody detects endogenous levels of total GABBR1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	784
Applicable Applications for anti-GABBR1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Secreted and Cell Membrane. Cell Junction > Synapse > Postsynaptic Cell Membrane. Colocalizes with ATF4 in hippocampal neuron dendritic membranes (By similarity). Moreover coexpression of GABA-B-R1 and GABA-B-R2 appears to be a prerequisite for maturation and transport of GABA-B-R1 to the plasma membrane.
Tissue Specificity	Highly expressed in brain (PubMed:9844003, PubMed:9753614, PubMed:9872744). Weakly expressed in heart, small intestine and uterus. Isoform 1A: Mainly expressed in granular cell and molecular layer (PubMed:9844003). Isoform 1B: Mainly expressed in Purkinje cells (PubMed:9844003). Isoform 1E: Predominantly expressed in peripheral tissues as kidney, lung, trachea, colon, small intestine, stomach, bone marrow, thymus and mammary gland (PubMed:10906333).
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)
Western blot analysis of extracts from K562 cells, using GABBR1 antibody.



IF (Immunofluorescence)
AAA325550 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-GABBR1 antibody	Function: Component of a heterodimeric G-protein coupled receptor for GABA, formed by GABBR1 and GABBR2 (PubMed:9872316, PubMed:9872744, PubMed:15617512, PubMed:18165688, PubMed:22660477, PubMed:24305054). 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:10906333, PubMed:10773016, PubMed:10075644, PubMed:9872744, PubMed:24305054). Signaling inhibits adenylate cyclase, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipid hydrolysis (PubMed:10075644). Calcium is required for high affinity binding to GABA (By similarity). Plays a critical role in the fine-tuning of inhibitory synaptic transmission (PubMed:9844003). 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:9844003, PubMed:9872316, PubMed:10075644, PubMed:9872744, PubMed:22660477). Not only implicated in synaptic inhibition but also in hippocampal long-term potentiation, slow wave sleep, muscle relaxation and antinociception (Probable). Activated by (-)-baclofen, cgp27492 and blocked by phaclofen (PubMed:9844003, PubMed:9872316, PubMed:24305054). Subunit Structure: Heterodimer of GABBR1 and GABBR2 (PubMed:9872316, PubMed:10773016, PubMed:9872744, PubMed:15617512, PubMed:18165688, PubMed:22660477, PubMed:24305054). Homodimers may form, but are inactive (PubMed:9872316, PubMed:15617512). Isoform 1E (without C-terminal intracellular domain) is unable to dimerize via a coiled-coil interaction with GABBR2 (PubMed:10906333). Interacts (via C-terminus) with ATF4 (via leucine zipper domain) (By similarity). Interacts with JAKMIP1 (PubMed:14718537). Similarity: Alpha-helical parts of the C-terminal intracellular region mediate heterodimeric interaction with GABBR2 (PubMed:9872744). The linker region between the transmembrane domain 3 (TM3) and the transmembrane domain 4 (TM4) probably plays a role in the specificity for G-protein coupling (PubMed:9844003). Belongs to the G-protein coupled receptor 3 family. GABA-B receptor subfamily.
References	Zhou YQ, Chen SP, Liu DQ, Manyande A, Zhang W, Yang SB, Xiong BR, Fu QC, Song ZP, Rittner H, Ye DW, Tian YK; Journal: J Pain. The Role of Spinal GABAB Receptors in Cancer-Induced Bone Pain in Rats.

NCBI AND UNIPROT INFORMATION

NCBI GI #	975830169
NCBI GeneID	2550
NCBI Accession #	NP_001305982.1
NCBI GenBank Nucleotide #	NM_001319053.1
UniProt Accession #	Q9UBS5; O95375; O95468; O95975; O96022; Q5STL4; Q5SUJ8; Q5SUL3; Q71SG6; Q86W60; Q9UQQ0; B0UXY7

Molecular Weight	Observed: 108 kD Predicted: 109 kDa
NCBI Official Full Name	gamma-aminobutyric acid type B receptor subunit 1 isoform k
NCBI Official Synonym Full Names	gamma-aminobutyric acid type B receptor subunit 1
NCBI Official Symbol	GABBR1
NCBI Official Synonym Symbols	GB1; GPRC3A; GABABR1; GABBR1-3
NCBI Protein Information	gamma-aminobutyric acid type B receptor subunit 1
UniProt Protein Name	Gamma-aminobutyric acid type B receptor subunit 1
UniProt Gene Name	**GABBR1**
UniProt Synonym Gene Names	GPRC3A; GABA-B receptor 1; GABA-B-R1; GABA-BR1; GABABR1; Gb1

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://www.aaabiotech.com/polyclonal/gabbr1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/325550