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GABRB2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14538b

Product Information

Application	WB, E
Primary Accession	P47870
Other Accession	P63137, NP_068711.1, NP_000804.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34430
Calculated MW	59150
Antigen Region	346-374

Additional Information

Gene ID	2561
Other Names	Gamma-aminobutyric acid receptor subunit beta-2, GABA(A) receptor subunit beta-2, GABRB2
Target/Specificity	This GABRB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 346-374 amino acids from the C-terminal region of human GAB_2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GABRB2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GABRB2 (HGNC:4082)
Function	Beta subunit of the heteropentameric ligand-gated chloride channel gated by gamma-aminobutyric acid (GABA), a major inhibitory neurotransmitter in

	the brain (PubMed:19763268, PubMed:27789573, PubMed:29950725, PubMed:8264558). GABA-gated chloride channels, also named GABA(A) receptors (GABAAR), consist of five subunits arranged around a central pore and contain GABA active binding site(s) located at the alpha and beta subunit interface(s) (PubMed:29950725). When activated by GABA, GABAARs selectively allow the flow of chloride anions across the cell membrane down their electrochemical gradient (By similarity). Chloride influx into the postsynaptic neuron following GABAAR opening decreases the neuron ability to generate a new action potential, thereby reducing nerve transmission (By similarity). GABAARs containing alpha-1 and beta-2 or -3 subunits exhibit synaptogenic activity; the gamma-2 subunit being necessary but not sufficient to induce rapid synaptic contacts formation (PubMed:23909897, PubMed:25489750). Extrasynaptic beta-2 receptors contribute to the tonic GABAergic inhibition (By similarity). Beta-containing GABAARs can simultaneously bind GABA and histamine where histamine binds at the interface of two neighboring beta subunits, which may be involved in the regulation of sleep and wakefulness (By similarity).
Cellular Location	Postsynaptic cell membrane {ECO:0000250|UniProtKB:P63138}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P63138}
Tissue Location	Isoform 1 and isoform 2 show reduced expression in schizophrenic brain. Isoform 3 shows increased expression in schizophrenic and bipolar disorder brains while isoform 4 shows reduced expression.

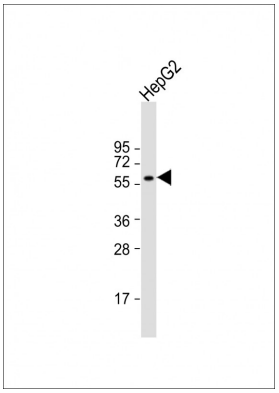
Background

The gamma-aminobutyric acid (GABA) A receptor is a multisubunit chloride channel that mediates the fastest inhibitory synaptic transmission in the central nervous system. This gene encodes GABA A receptor, beta 2 subunit. It is mapped to chromosome 5q34 in a cluster comprised of genes encoding alpha 1 and gamma 2 subunits of the GABA A receptor. Alternative splicing of this gene generates 2 transcript variants, differing by a 114 bp insertion.

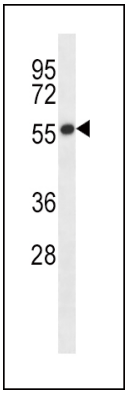
References

Lo, W.Y., et al. J. Biol. Chem. 285(41):31348-31361(2010)
Green, E.K., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (7), 1347-1349 (2010) :
Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :
Chen, J., et al. Biochem. Soc. Trans. 37 (PT 6), 1415-1418 (2009) :
Tabakoff, B., et al. BMC Biol. 7, 70 (2009) :

Images



Anti-GABRB2 Antibody (C-term) at 1:500 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



GABRB2 Antibody (C-term) (Cat. #AP14538b) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the GABRB2 antibody detected the GABRB2 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.