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GABA A Receptor beta 2 Antibody

Rabbit mAb
Catalog # AP91695

Product Information

Application	WB
Primary Accession	P47870
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	GABA; GABA(A) receptor beta 2; GABA(A) receptor subunit beta-2; GABRB2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	59150

Additional Information

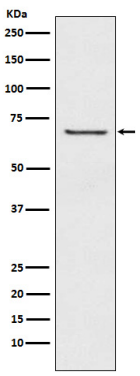
Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human GABA A Receptor beta 2
Description	GABA, the major inhibitory neurotransmitter in the vertebrate brain, mediates neuronal inhibition by binding to the GABA/benzodiazepine receptor and opening an integral chloride channel.
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.

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.

Images



Western blot analysis of GABA A Receptor beta 2 expression in A549 cell lysate.

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