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GABRA2 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI16205

Product Information

Application	WB
Primary Accession	P47869
Other Accession	NM_000807, NP_000798
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51326

Additional Information

Gene ID	2555
Other Names	Gamma-aminobutyric acid receptor subunit alpha-2, GABA(A) receptor subunit alpha-2, GABRA2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-GABRA2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	GABRA2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GABRA2 (HGNC:4076)
Function	Alpha subunit of the heteropentameric ligand-gated chloride channel gated by gamma-aminobutyric acid (GABA), a major inhibitory neurotransmitter in the brain (PubMed:10449790, PubMed:29961870, PubMed:31032849). 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 interfaces (By similarity). When activated by GABA, GABAARs selectively allow the flow of chloride anions across the cell membrane down their electrochemical gradient (PubMed:10449790). 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). The

	alpha-2 subunit exhibits synaptogenic activity together with beta-2 and very little to no activity together with beta-3, the gamma-2 subunit being necessary but not sufficient to induce rapid synaptic contacts formation (By similarity).
Cellular Location	Postsynaptic cell membrane {ECO:0000250|UniProtKB:P26048}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:P26048}; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P23576}. Cell projection, dendrite {ECO:0000250|UniProtKB:P26048}

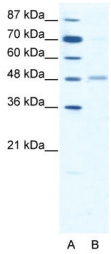
Background

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.

References

Hadingham K.L.,et al.Mol. Pharmacol. 43:970-975(1993).
Hillier L.W.,et al.Nature 434:724-731(2005).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Images



WB Suggested Anti-GABRA2 Antibody Titration: 1.25µg/ml
ELISA Titer: 1:62500
Positive Control: HepG2 cell lysate