

GABRA2 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP9297b

Specification

GABRA2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>P47869</u>

GABRA2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 2555

Other Names Gamma-aminobutyric acid receptor subunit alpha-2, GABA(A) receptor subunit alpha-2, GABRA2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9297b was selected from the C-term region of human GABRA2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GABRA2 Antibody (C-term) Blocking Peptide - 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:29961870, 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}

GABRA2 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

GABRA2 Antibody (C-term) Blocking Peptide - Images

GABRA2 Antibody (C-term) Blocking Peptide - Background

GABRA2 is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. At least 16 distinct subunits of GABA-A receptors have been identified.

GABRA2 Antibody (C-term) Blocking Peptide - References

Das,S., et.al., Stat Med 29 (11), 1250-1258 (2010)Bierut,L.J., et.al., Proc. Natl. Acad. Sci. U.S.A. 107 (11), 5082-5087 (2010)Dixon,C.I., et.al, Proc. Natl. Acad. Sci. U.S.A. 107 (5), 2289-2294 (2010)