

GABRA2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9297b**Specification**

GABRA2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P47869](#)**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](/products/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**Function**

Ligand-gated chloride channel which is a component of the heteropentameric receptor for GABA, the major inhibitory neurotransmitter in the brain (PubMed: [29961870](http://www.uniprot.org/citations/29961870), PubMed: [31032849](http://www.uniprot.org/citations/31032849)). Plays an important role in the formation of functional inhibitory GABAergic synapses in addition to mediating synaptic inhibition as a GABA-gated ion channel (PubMed: [29961870](http://www.uniprot.org/citations/29961870), PubMed: [31032849](http://www.uniprot.org/citations/31032849)). The gamma2 subunit is necessary but not sufficient for a rapid formation of active synaptic contacts and the synaptogenic effect of this subunit is influenced by the type of alpha and beta subunits present in the receptor pentamer (By similarity). The alpha2/beta2/gamma2 receptor exhibits synaptogenic activity whereas the alpha2/beta3/gamma2 receptor shows very little or no synaptogenic activity

(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)