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GABRD Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9299c

Specification

GABRD Antibody (Center) Blocking Peptide - Product Information

Primary Accession O14764

GABRD Antibody (Center) Blocking Peptide - Additional Information

Gene ID 2563

Other Names
Gamma-aminobutyric acid receptor subunit delta, GABA(A) receptor subunit delta, GABRD

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9299c was selected from the Center region of human GABRD. 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.

GABRD Antibody (Center) Blocking Peptide - Protein Information

Name GABRD (HGNC:4084)

Function
Delta subunit of the heteropentameric ligand-gated chloride channel gated by gamma-aminobutyric acid (GABA), a major inhibitory neurotransmitter in the brain (PubMed:35355020). 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:35355020). When activated by GABA, GABAARs selectively allow the flow of chloride anions across the cell membrane down their electrochemical gradient (PubMed:35355020). GABAARs containing delta/GABRD subunits are predominantly located in extrasynaptic or perisynaptic positions on hippocampus and cerebellar granule cells, and contribute to the tonic GABAergic inhibition (By similarity). GABAAR containing alpha-4-beta-3-delta subunits 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 (PubMed:35355020).

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:P18506}; Multi-pass membrane protein

GABRD Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

GABRD Antibody (Center) Blocking Peptide - Images

GABRD Antibody (Center) Blocking Peptide - Background

GABRD 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. The GABA-A receptor is generally pentameric and there are five types of subunits: alpha, beta, gamma, delta, and rho. This protein encodes the delta subunit.

GABRD Antibody (Center) Blocking Peptide - References

Gratacos,M., et.al, Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B (6), 808-816 (2009)Maldonado-Aviles,J.G., et.al, Am J Psychiatry 166 (4), 450-459 (2009)Tabakoff,B., et.al, BMC Biol. 7, 70 (2009)