

GABRR1 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19525A

Specification

GABRR1 Antibody(N-term) - Product Information

Application WB,E **Primary Accession** P24046 Other Accession NP 002033.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 55883 Antigen Region 19-48

GABRR1 Antibody(N-term) - Additional Information

Gene ID 2569

Other Names

Gamma-aminobutyric acid receptor subunit rho-1, GABA(A) receptor subunit rho-1, GABA(C) receptor, GABRR1

Target/Specificity

This GABRR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 19-48 amino acids from the N-terminal region of human GABRR1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GABRR1 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GABRR1 Antibody(N-term) - Protein Information

Name GABRR1 (HGNC:4090)



Function Rho subunit of the pentameric ligand-gated chloride channels responsible for mediating the effects of gamma-aminobutyric acid (GABA), the major inhibitory neurotransmitter in the brain (PubMed:37659407). Rho-containing GABA-gated chloride channels are a subclass of GABA(A) receptors (GABAARs) entirely composed of rho subunits, where GABA molecules bind at the rho intersubunit interfaces (PubMed:37659407). When activated by GABA, rho-GABAARs selectively allow the flow of chloride anions across the cell membrane down their electrochemical gradient (PubMed:37659407). Rho-1 subunits are primarily expressed in retina where rho-1-containing GABAARs may play a role in retinal neurotransmission (PubMed:1849271). Rho-1 GABAARs are also involved in neuronal tonic (extrasynaptic) and phasic (synaptic) transmission in the Purkinje neurons of the cerebellum (By similarity). Rho-1 GABAARs may also contribute to the regulation of glial development in the cerebellum by controlling extrasynaptic transmission (By similarity).

Cellular Location

Postsynaptic cell membrane {ECO:0000250|UniProtKB:P56475}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

Tissue Location

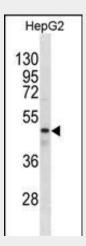
Highly expressed in the retina (PubMed:1849271). Expressed in a lesser extent in brain, lung and thymus (PubMed:1849271).

GABRR1 Antibody(N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GABRR1 Antibody(N-term) - Images



GABRR1 Antibody (N-term) (Cat. #AP19525a) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the GABRR1 antibody detected the GABRR1 protein (arrow).

GABRR1 Antibody(N-term) - Background





GABA is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA receptors, which are ligand-gated chloride channels. GABRR1 is a member of the rho subunit family.

GABRR1 Antibody(N-term) - References

Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010): Green, E.K., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. (2010) In press: Reyes-Ruiz, J.M., et al. Biochim. Biophys. Acta 1798(5):1002-1007(2010)

Xuei, X., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (2), 418-427 (2010): Kang, J.Q., et al. Trends Mol Med 15(9):430-438(2009)