

Anti-GABRA4 Antibody
Rabbit polyclonal antibody to GABRA4
Catalog # AP59561**Specification**

Anti-GABRA4 Antibody - Product Information

Application	WB
Primary Accession	P48169
Other Accession	Q9D6F4
Reactivity	Human, Mouse, Rat, Monkey, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61623

Anti-GABRA4 Antibody - Additional Information**Gene ID** 2557**Other Names**

Gamma-aminobutyric acid receptor subunit alpha-4; GABA(A) receptor subunit alpha-4

Target/Specificity

Recognizes endogenous levels of GABRA4 protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-GABRA4 Antibody - Protein Information**Name** GABRA4 ([HGNC:4078](#))**Function**

Alpha 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 alpha-4 are predominantly extrasynaptic, contributing to tonic inhibition in dentate granule cells and thalamic relay neurons (By similarity). Extrasynaptic alpha-4-containing GABAARs control levels of excitability and network activity (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:Q9D6F4}; Multi-pass membrane protein {ECO:0000269|PubMed:35355020, ECO:0007744|PDB:7QN5}. Postsynaptic cell membrane; Multi-pass membrane protein {ECO:0000269|PubMed:35355020, ECO:0007744|PDB:7QN5}

Tissue Location

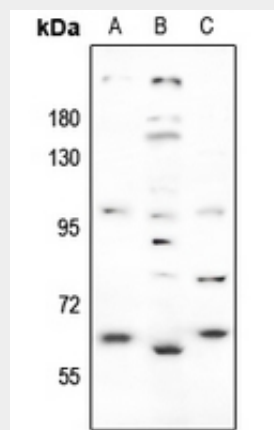
Expressed in the brain. {ECO:0000250|UniProtKB:Q9D6F4}

Anti-GABRA4 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GABRA4 Antibody - Images



Western blot analysis of GABRA4 expression in U87MG (A), EC9706 (B), H9C2 (C) whole cell lysates.

Anti-GABRA4 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GABRA4. The exact sequence is proprietary.