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# GABA A Receptor α2 Polyclonal Antibody

Catalog # AP63678

## Product Information

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|---|---|
| **Application** | WB, IHC-P |
| **Primary Accession** | P47869 |
| **Reactivity** | Human, Rat, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 51326 |

## Additional Information

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|---|---|
| **Gene ID** | 2555 |
| **Other Names** | Gamma-aminobutyric acid receptor subunit alpha-2 (GABA(A) receptor subunit alpha-2) |
| **Dilution** | WB~~WB 1:1000-2000, IHC 1:100-200 IHC-P~~WB 1:1000-2000, IHC 1:100-200 |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

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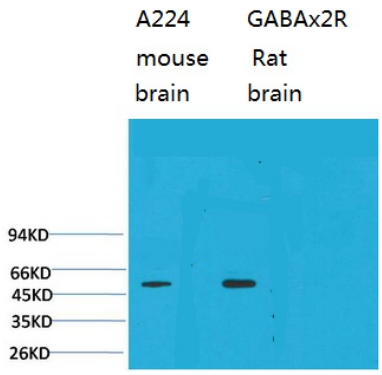
|---|---|
| **Name** | GABRA2 ( HGNC:4076) |
| **Function** | Alpha subunit of the heteropentameric ligand-gated chloride channel gated by gamma-aminobutyric acid (GABA), a major inhibitory neurotransmitter in the brain (PubMed:10449790, PubMed:29961870, PubMed:31032849). GABA-gated chloride channels, 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}

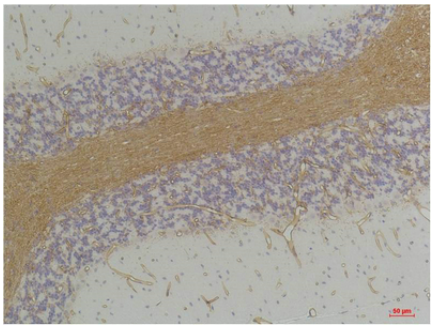
## Background

GABA, the major inhibitory neurotransmitter in the vertebrate brain, mediates neuronal inhibition by binding to the GABA/benzodiazepine receptor and opening an integral chloride channel.

## Images




Western blot analysis of 1) Mouse Brain Tissue, 2)Rat Brain Tissue with GABA A Receptor α2 Rabbit pAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Rat BrainTissue using GABA A Receptor α2 Rabbit pAb diluted at 1:200.