

Goat Anti-GABRG2 Antibody (aa384-396) (internal region)
Catalog # AF4302a**Specification****Goat Anti-GABRG2 Antibody (aa384-396) (internal region) - Product Information**

Application	WB, E
Primary Accession	P18507
Other Accession	NP_944494.1 , NP_000807.2 , NP_944493.2 , 29709 , 14406 , 2566
Reactivity	Human, Mouse, Rat, Pig
Predicted	Human, Mouse, Rat, Pig, Dog
Host	Goat
Isotype	IgG
Calculated MW	55186

Goat Anti-GABRG2 Antibody (aa384-396) (internal region) - Additional Information**Gene ID** 2566**Other Names**

Gamma-aminobutyric acid receptor subunit gamma-2, GABA(A) receptor subunit gamma-2, GABRG2

Dilution

WB~~1:1000

E~~N/A

Immunogen

This antibody is expected to recognize all three reported isoforms (NP_944494.1; NP_000807.2; NP_944493.2).

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-GABRG2 Antibody (aa384-396) (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GABRG2 Antibody (aa384-396) (internal region) - Protein Information**Name** GABRG2 ([HGNC:4087](#))**Function**

Gamma subunit of the heteropentameric ligand-gated chloride channel gated by gamma-aminobutyric acid (GABA), a major inhibitory neurotransmitter in the brain (PubMed:14993607, PubMed:14993607).

[16412217](http://www.uniprot.org/citations/16412217), PubMed: [23909897](http://www.uniprot.org/citations/23909897), PubMed: [2538761](http://www.uniprot.org/citations/2538761), PubMed: [25489750](http://www.uniprot.org/citations/25489750), PubMed: [27864268](http://www.uniprot.org/citations/27864268), PubMed: [29950725](http://www.uniprot.org/citations/29950725), PubMed: [30602789](http://www.uniprot.org/citations/30602789)). 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: [29950725](http://www.uniprot.org/citations/29950725), PubMed: [30602789](http://www.uniprot.org/citations/30602789)). When activated by GABA, GABAARs selectively allow the flow of chloride anions across the cell membrane down their electrochemical gradient (PubMed: [14993607](http://www.uniprot.org/citations/14993607), PubMed: [16412217](http://www.uniprot.org/citations/16412217), PubMed: [2538761](http://www.uniprot.org/citations/2538761), PubMed: [27864268](http://www.uniprot.org/citations/27864268), PubMed: [29950725](http://www.uniprot.org/citations/29950725), PubMed: [30602789](http://www.uniprot.org/citations/30602789)). Gamma-2/GABRG2-containing GABAARs are found at both synaptic and extrasynaptic sites (By similarity). 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). GABAARs containing alpha-1 and beta-2 or -3 subunits exhibit synaptogenic activity; the gamma-2 subunit being necessary but not sufficient to induce rapid synaptic contacts formation (PubMed: [23909897](http://www.uniprot.org/citations/23909897), PubMed: [25489750](http://www.uniprot.org/citations/25489750)). Extrasynaptic gamma-2- containing receptors contribute to the tonic GABAergic inhibition (By similarity). GABAARs function also as histamine receptor where histamine binds at the interface of two neighboring beta subunits and potentiates GABA response in a gamma-2 subunit-controlled manner (By similarity).

Cellular Location

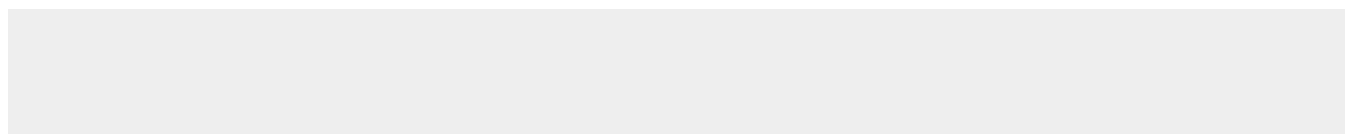
Postsynaptic cell membrane; Multi-pass membrane protein {ECO:0000269|PubMed:30602789, ECO:0007744|PDB:6I53}. Cell membrane; Multi-pass membrane protein {ECO:0000269|PubMed:30602789, ECO:0007744|PDB:6I53} Cell projection, dendrite {ECO:0000250|UniProtKB:P22723}. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P18508}

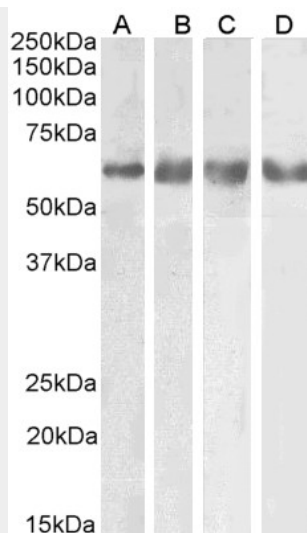
Goat Anti-GABRG2 Antibody (aa384-396) (internal region) - Protocols

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](#)

Goat Anti-GABRG2 Antibody (aa384-396) (internal region) - Images





AF4302a (0.1 $\mu\text{g/ml}$) staining of Human Cerebellum (A), Mouse (B), Rat (C) and Pig (D) Brain lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.