

**GABRA2 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI16205****Specification**

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**GABRA2 antibody - middle region - Product Information**

Application	WB
Primary Accession	<a href="#">P47869</a>
Other Accession	<a href="#">NM_000807</a> , <a href="#">NP_000798</a>
Reactivity	Human, Mouse, Rat, Rabbit, Horse, Bovine, Dog
Predicted	Human, Mouse, Rat, Rabbit, Chicken, Horse, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51kDa kDa

**GABRA2 antibody - middle region - Additional Information****Gene ID** 2555**Other Names**

Gamma-aminobutyric acid receptor subunit alpha-2, GABA(A) receptor subunit alpha-2, GABRA2

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-GABRA2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

GABRA2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

**GABRA2 antibody - middle region - Protein Information****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](http://www.uniprot.org/citations/10449790), PubMed: [29961870](http://www.uniprot.org/citations/29961870), PubMed: [31032849](http://www.uniprot.org/citations/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:<a href="http://www.uniprot.org/citations/10449790" target="\_blank">10449790</a>). 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

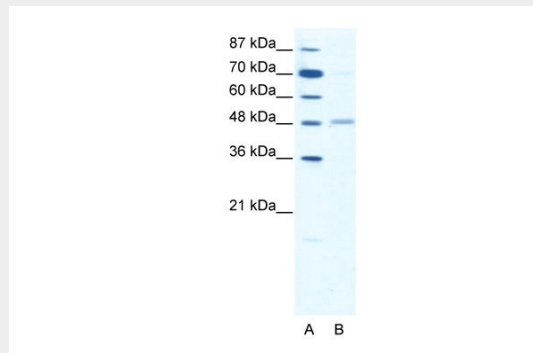
Postsynaptic cell membrane {ECO:0000250|UniProtKB:P26048}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:P26048}; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P23576}. Cell projection, dendrite {ECO:0000250|UniProtKB:P26048}

#### GABRA2 antibody - middle 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](#)

#### GABRA2 antibody - middle region - Images



WB Suggested Anti-GABRA2 Antibody Titration: 1.25µg/ml  
ELISA Titer: 1:62500  
Positive Control: HepG2 cell lysate

#### GABRA2 antibody - middle region - 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.

#### GABRA2 antibody - middle region - References

Hadingham K.L., et al. Mol. Pharmacol. 43:970-975(1993).  
Hillier L.W., et al. Nature 434:724-731(2005).

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.

Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.