

## GABRB2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14538b

## **Specification**

### GABRB2 Antibody (C-term) - Product Information

Application WB,E
Primary Accession P47870

Other Accession P63137, NP 068711.1, NP 000804.1

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
346-374

## GABRB2 Antibody (C-term) - Additional Information

#### **Gene ID 2561**

### **Other Names**

Gamma-aminobutyric acid receptor subunit beta-2, GABA(A) receptor subunit beta-2, GABRB2

### Target/Specificity

This GABRB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 346-374 amino acids from the C-terminal region of human GAB\_2.

# **Dilution**

WB~~1:1000

### **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**

GABRB2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## GABRB2 Antibody (C-term) - Protein Information

# Name GABRB2

**Function** Ligand-gated chloride channel which is a component of the heteropentameric receptor for GABA, the major inhibitory neurotransmitter in the brain (PubMed: 8264558, PubMed: 19763268,



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PubMed: 27789573, PubMed: 29950725). Plays an important role in the formation of functional inhibitory GABAergic synapses in addition to mediating synaptic inhibition as a GABA-gated ion channel (PubMed: 23909897, PubMed: 25489750). The gamma2 subunit is necessary but not sufficient for a rapid formation of active synaptic contacts and the synaptogenic effect of this subunit is influenced by the type of alpha and beta subunits present in the receptor pentamer (By similarity). The alpha1/beta2/gamma2 receptor and the alpha2/beta2/gamma2 receptor exhibit synaptogenic activity (PubMed: 23909897, PubMed: 25489750). Functions also as histamine receptor and mediates cellular responses to histamine (By similarity).

### **Cellular Location**

Postsynaptic cell membrane {ECO:0000250|UniProtKB:P63137}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P63138}

### **Tissue Location**

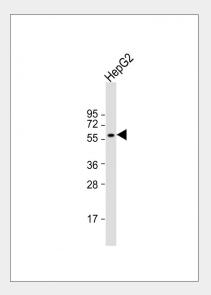
Isoform 1 and isoform 2 show reduced expression in schizophrenic brain. Isoform 3 shows increased expression in schizophrenic and bipolar disorder brains while isoform 4 shows reduced expression.

# GABRB2 Antibody (C-term) - Protocols

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

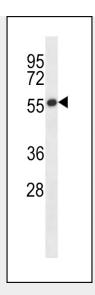
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## GABRB2 Antibody (C-term) - Images



Anti-GABRB2 Antibody (C-term) at 1:500 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





GABRB2 Antibody (C-term) (Cat. #AP14538b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the GABRB2 antibody detected the GABRB2 protein (arrow).

# GABRB2 Antibody (C-term) - Background

The gamma-aminobutyric acid (GABA) A receptor is a multisubunit chloride channel that mediates the fastest inhibitory synaptic transmission in the central nervous system. This gene encodes GABA A receptor, beta 2 subunit. It is mapped to chromosome 5q34 in a cluster comprised of genes encoding alpha 1 and gamma 2 subunits of the GABA A receptor. Alternative splicing of this gene generates 2 transcript variants, differing by a 114 bp insertion.

# GABRB2 Antibody (C-term) - References

Lo, W.Y., et al. J. Biol. Chem. 285(41):31348-31361(2010)
Green, E.K., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (7), 1347-1349 (2010):
Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010):
Chen, J., et al. Biochem. Soc. Trans. 37 (PT 6), 1415-1418 (2009):
Tabakoff, B., et al. BMC Biol. 7, 70 (2009):