

## **Anti-GABRD Antibody**

Rabbit polyclonal antibody to GABRD Catalog # AP60763

## **Specification**

## **Anti-GABRD Antibody - Product Information**

Application WB, IHC
Primary Accession O14764
Other Accession P22933

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 50708

# **Anti-GABRD Antibody - Additional Information**

#### **Gene ID 2563**

#### **Other Names**

Gamma-aminobutyric acid receptor subunit delta; GABA(A) receptor subunit delta

### Target/Specificity

Recognizes endogenous levels of GABRD protein.

## **Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200) IHC~~1:100~500

#### **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-GABRD Antibody - Protein Information**

## Name GABRD (HGNC:4084)

### **Function**

Delta subunit of the heteropentameric ligand-gated chloride channel gated by gamma-aminobutyric acid (GABA), a major inhibitory neurotransmitter in the brain (PubMed:<a href="http://www.uniprot.org/citations/35355020" target="\_blank">35355020</a>). 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:<a href="http://www.uniprot.org/citations/35355020" target="\_blank">35355020</a>). When activated by GABA, GABAARs selectively allow the flow of chloride anions across the cell membrane down their electrochemical gradient (PubMed:<a



Tel: 858.875.1900 Fax: 858.875.1999

href="http://www.uniprot.org/citations/35355020" target=" blank">35355020</a>). GABAARs containing delta/GABRD subunits are predominantly located in extrasynaptic or perisynaptic positions on hippocampus and cerebellar granule cells, and contribute to the tonic GABAergic inhibition (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:<a href="http://www.uniprot.org/citations/35355020" target=" blank">35355020</a>).

## **Cellular Location**

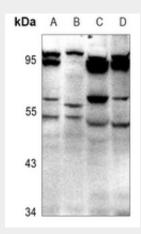
Cell membrane {ECO:0000250|UniProtKB:P18506}; Multi-pass membrane protein

# **Anti-GABRD Antibody - Protocols**

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

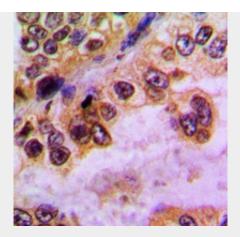
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-GABRD Antibody - Images



Western blot analysis of GABRD expression in SGC7901 (A), HepG2 (B), BV2 (C), PC12 (D) whole cell lysates.





Immunohistochemical analysis of GABRD staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

# **Anti-GABRD Antibody - Background**

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