

# GNAI2/G protein alpha inhibitor 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59037

#### **Product Information**

**Application** IHC-P, IHC-F, IF, ICC, E

Primary Accession P04899

**Reactivity** Rat, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 40451
Physical State Liquid

**Immunogen** KLH conjugated synthetic peptide derived from human G Protein alpha

Inhibitor 1

**Epitope Specificity** 265-355/355

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Cytoplasm. Cytoplasm, cytoskeleton, centrosome. Cell membrane.

Note=Localizes in the centrosomes of interphase and mitotic cells. Detected

at the cleavage furrow and/or the midbody.

**SIMILARITY** Belongs to the G-alpha family. G(i/o/t/z) subfamily.

**SUBUNIT** G proteins are composed of 3 units; alpha, beta and gamma. The alpha chain

contains the guanine nucleotide binding site. Interacts with GPSM1. Interacts

with RGS12 and RGS14. Interacts with UNC5B.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** The G protein family of signal transducers includes 5 heterotrimers, which are

most clearly distinguished by their different alpha chains; they have virtually identical beta chains and similar gamma chains. G protein alpha inhibitor chains 1 and 2 are subunits of the G(i) G protein, whose role is in inhibiting

adenylate cyclase activity in response to bound GTP.

### **Additional Information**

Gene ID 2771

Other Names Guanine nucleotide-binding protein G(i) subunit alpha-2, Adenylate

cyclase-inhibiting G alpha protein, GNAI2, GNAI2B

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### **Protein Information**

Name GNAI2

Synonyms GNAI2B

**Function** Guanine nucleotide-binding proteins (G proteins) are involved as modulators

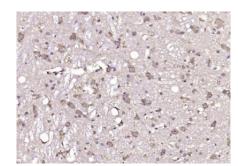
or transducers in various transmembrane signaling systems. The G(i) proteins are involved in hormonal regulation of adenylate cyclase: they inhibit the cyclase in response to beta- adrenergic stimuli. May play a role in cell division.

**Cellular Location** Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center,

centrosome. Cell membrane. Membrane; Lipid-anchor. Note=Localizes in the centrosomes of interphase and mitotic cells. Detected at the cleavage furrow

and/or the midbody

## **Images**



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GNAI2 G protein alpha inhibitor 1) Polyclonal Antibody, Unconjugated (AP59037) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.