

### Gai2 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10194

### Specification

## Gai2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IP P04899 AAM12620 Human Rabbit Polyclonal Rabbit IgG 40451

## Gai2 Antibody - Additional Information

Gene ID 2771

Application & Usage

Western blot (at 0.5-4  $\mu g/ml$ ) and immunoprecipitation. However, the optimal conditions should be determined individually.

**Other Names** guanine nucleotide binding protein G, GNAI2B, guanine nucleotide binding protein

Target/Specificity Gai2

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** 100  $\mu$ g (0.5 mg/ml) affinity-purified rabbit anti-G $\alpha$ i2 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

#### **Precautions**

Gai2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



## Gai2 Antibody - 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

#### Gai2 Antibody - Protocols

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

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

#### Gai2 Antibody - Images



Western blot analysis of  $G\alpha i2$  expression in 3T3 cell lysate.

# Gai2 Antibody - Background



 $G\alpha i2$  is a 40-41 kDa alpha-subunit of heterotrimeric protein that shares sequence homology with  $G\alpha i3$  and  $G\alpha i1$ . All these G proteins can be ADP-ribosylated at the carboxy terminal Cys of the CAAX sequence, interfering with receptor coupling.  $G\alpha i2$  is expressed widely in tissues and cell lines. Activation of PLC- $\beta$  by  $G\alpha$ i-coupled receptors is the result of release of  $G\beta g$  subunits from  $G\alpha i$ .  $G\alpha i2$  regulates potassium channel activation. Mutation at Arg179 has been identified in tumors. This and the Q205L mutant inhibit adenylyl cyclase.