

## GNAI3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP21247a

### Specification

#### GNAI3 Antibody - Product Information

Application	WB,E
Primary Accession	<a href="#">P08754</a>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Calculated MW	40532

#### GNAI3 Antibody - Additional Information

Gene ID 2773

#### Other Names

Guanine nucleotide-binding protein G(k) subunit alpha, G(i) alpha-3, GNAI3

#### Target/Specificity

This GNAI3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 309-343 amino acids from the human region of human GNAI3.

#### Dilution

WB ~ 1:2000

#### Format

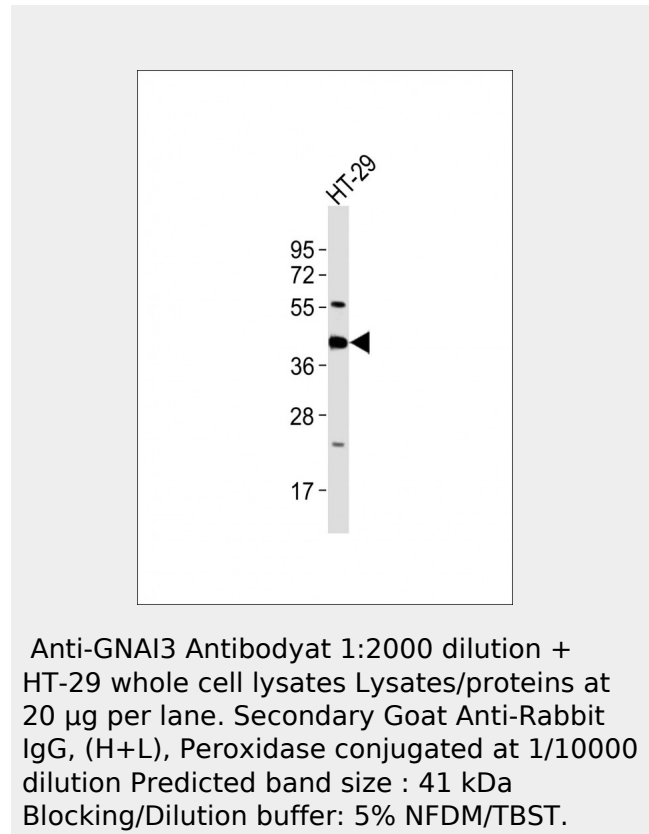
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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

GNAI3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



#### GNAI3 Antibody - Background

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. G(k) is the stimulatory G protein of receptor-regulated K(+) channels. The active GTP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. May play a role in cell division.

#### GNAI3 Antibody - References

- Didsbury J.R., et al. FEBS Lett. 219:259-263(1987).
- Beals C.R., et al. Proc. Natl. Acad. Sci. U.S.A. 84:7886-7890(1987).
- Itoh H., et al. J. Biol. Chem. 263:6656-6664(1988).

**GNAI3 Antibody - Protein Information****Name** GNAI3**Function**

Heterotrimeric guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs) in numerous signaling cascades. The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state. Signaling by an activated GPCR promotes GDP release and GTP binding. The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal. Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins (PubMed:[8774883](http://www.uniprot.org/citations/8774883), PubMed:[18434541](http://www.uniprot.org/citations/18434541), PubMed:[19478087](http://www.uniprot.org/citations/19478087)). Signaling is mediated via effector proteins, such as adenylyl cyclase. Inhibits adenylyl cyclase activity, leading to decreased intracellular cAMP levels (PubMed:[19478087](http://www.uniprot.org/citations/19478087)). Stimulates the activity of receptor-regulated K(+) channels (PubMed:[2535845](http://www.uniprot.org/citations/2535845)). The active GTP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. May play a role in cell division (PubMed:[17635935](http://www.uniprot.org/citations/17635935)).

**Cellular Location**

Cytoplasm. Cell membrane; Lipid-anchor. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome  
Note=Localizes in the centrosomes of interphase and mitotic cells Detected at the cleavage furrow and/or the midbody

Codina J.,et al.J. Biol. Chem.  
263:6746-6750(1988).Kim S.,et al.Proc. Natl. Acad. Sci. U.S.A.  
85:4153-4157(1988).

## **GNAI3 Antibody - 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](#)