

Anti-GNAI1 / Gi Antibody (N-Terminus)
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17464**Specification**

Anti-GNAI1 / Gi Antibody (N-Terminus) - Product Information

Application	WB, IHC-P
Primary Accession	P63096
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40361

Anti-GNAI1 / Gi Antibody (N-Terminus) - Additional Information**Gene ID** 2770

Alias Symbol	GNAI1
Other Names	
GNAI1, Gi1 protein alpha subunit, Gi	

Target/Specificity

Endogenous levels of mouse and rat G alpha(i). It is predicted to react with human G alpha(i) according to sequence homology. Positive Control: Mouse and Rat brain.

Reconstitution & Storage

Lyophilized from PBS, pH 7.4, 0.02% sodium azide. Store lyophilized at -20°C. The reconstituted product can be stored for short term at 4 °C or long term at -20 °C or below. Avoid freeze/thaw cycles.

Precautions

Anti-GNAI1 / Gi Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-GNAI1 / Gi Antibody (N-Terminus) - Protein Information**Name** GNAI1**Function**

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: <http://www.uniprot.org/citations/8774883> target="_blank">8774883, PubMed: <http://www.uniprot.org/citations/18434541> target="_blank">18434541). Signaling is mediated via effector proteins, such as adenylate

cyclase. Inhibits adenylate cyclase activity, leading to decreased intracellular cAMP levels (By similarity). The inactive GDP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. Required for normal cytokinesis during mitosis (PubMed:17635935). Required for cortical dynein-dynactin complex recruitment during metaphase (PubMed:22327364).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:P10824}. Cytoplasm. Cell membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P10824}; Cytoplasmic side {ECO:0000250|UniProtKB:P10824}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cell cortex. Membrane {ECO:0000250|UniProtKB:P10824}; Lipid-anchor Note=Localizes in the centrosomes of interphase and mitotic cells, but not in centrosomes during cytokinesis. Detected at the cleavage furrow or the midbody (PubMed:17635935). Localized at the plasma membrane throughout mitosis. Colocalizes with RIC8A and RGS14 at the plasma membrane. {ECO:0000250|UniProtKB:P10824, ECO:0000269|PubMed:17635935}

Anti-GNAI1 / Gi Antibody (N-Terminus) - 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](#)

Anti-GNAI1 / Gi Antibody (N-Terminus) - Images