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GNAI3 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14336

Product Information

Application	WB
Primary Accession	P08754
Other Accession	NM_006496, NP_006487
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Goat, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40532

Additional Information

Gene ID	2773
Alias Symbol	87U6, FLJ26559
Other Names	Guanine nucleotide-binding protein G(k) subunit alpha, G(i) alpha-3, GNAI3
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-GNAI3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	GNAI3 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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 (By similarity). Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins (PubMed:18434541, PubMed:19478087, PubMed:8774883). Signaling is mediated via effector proteins, such as

adenylate cyclase. Inhibits adenylate cyclase activity, leading to decreased intracellular cAMP levels (PubMed:19478087). Stimulates the activity of receptor-regulated K(+) channels (PubMed: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). The active GTP-bound form activates the calcium permeant TRPC5 ion channels (PubMed:37137991).

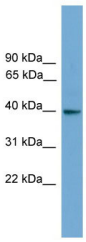
Cellular Location

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

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).
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).

Images



WB Suggested Anti-GNAI3 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: Human brain

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