

Rabbit GNAI3 Polyclonal Antibody | anti-GNAI3 antibody

GNAI3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA324773	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

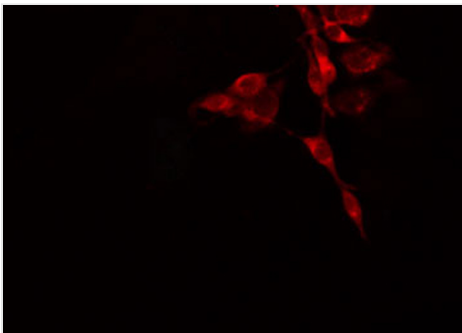
PRODUCT SYNONYMS

GNAI3; Polyclonal Antibody; GNAI3 Antibody; 87U6; FLJ26559; G protein alpha inhibiting 3; G(i) alpha 3; G(i) alpha-3; GNAI3_HUMAN; Guanine nucleotide binding protein (G protein) alpha inhibiting activity polypeptide 3; Guanine nucleotide binding protein G(k) alpha subunit; Guanine nucleotide-binding protein G(k) subunit alpha; OTTHUMP00000013368; anti-GNAI3 antibody

PRODUCT SPECIFICATIONS

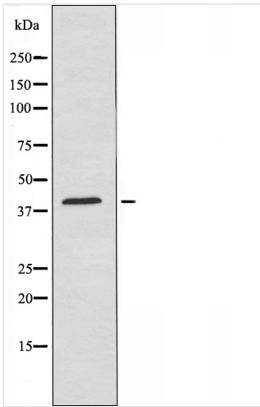
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	GNAI3 antibody detects endogenous levels of total GNAI3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	354
Applicable Applications for anti-GNAI3 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasm. Cell Membrane. Cytoplasm > Cytoskeleton > Centrosome. Localizes in the centrosomes of interphase and mitotic cells. Detected at the cleavage furrow and/or the midbody.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Sheep, Rabbit, Dog, Xenopus
Similarity	Pig (90%), Zebrafish (100%), Bovine (90%), Sheep (90%), Rabbit (90%), Dog (90%), Xenopus (80%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA324773 staining HepG2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from HepG2 using GNAI3 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-GNAI3 antibody

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, PubMed:18434541, PubMed:19478087). 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).

Subunit Structure: Heterotrimeric G proteins are composed of 3 units; alpha, beta and gamma. The alpha subunit contains the guanine nucleotide binding site. GTP binding causes dissociation of the heterotrimer, liberating the individual subunits so that they can interact with downstream effector proteins. Interacts with GPSM1 (By similarity). Interacts (GDP-bound form) with GPSM2 (via GoLoco domains) (PubMed:22952234). Does not interact with RGS2 (PubMed:19478087). Interacts with RGS8 and RGS10; this strongly enhances the intrinsic GTPase activity (PubMed:8774883, PubMed:18434541). Interacts with RGS16; this strongly enhances the intrinsic GTPase activity (PubMed:19478087). Interacts with RGS12 (By similarity). Interacts (via active GTP-or inactive GDP-bound form) with RGS14 (By similarity).

Post-translational Modifications: (Microbial infection) Deamidated at Gln-204 by Photorhabdus asymbiotica toxin PAU_02230, blocking GTP hydrolysis of heterotrimeric GNAQ or GNA11 and G-alphai (GNAI1, GNAI2 or GNAI3) proteins, thereby activating RhoA.

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

NCBI AND UNIPROT INFORMATION

NCBI GI #	5729850
NCBI GeneID	2773
NCBI Accession #	NP_006487.1
NCBI GenBank Nucleotide #	NM_006496.3
UniProt Accession #	P08754; P17539; Q5TZX1
Molecular Weight	Observed: 41 kD Predicted: 41 kDa
NCBI Official Full Name	guanine nucleotide-binding protein G(k) subunit alpha
NCBI Official Synonym Full Names	G protein subunit alpha i3

NCBI Official Symbol	GNAI3
NCBI Official Synonym Symbols	87U6; ARCND1
NCBI Protein Information	guanine nucleotide-binding protein G(k) subunit alpha
UniProt Protein Name	Guanine nucleotide-binding protein G(k) subunit alpha
UniProt Gene Name	GNAI3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gnai3-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/324773>